



DEPARTMENT OF THE AIR FORCE  
AIR FORCE RESEARCH LABORATORY  
WRIGHT-PATTERSON AIR FORCE BASE OHIO 45433

10 May 2001

MEMORANDUM FOR US EPA

NCEA (MD-52)  
RTP, NC 27711  
ATTN: ANNIE M. JARABEK

FROM: Elaine Merrill  
AFRL/HEST  
Operational Toxicology Branch  
2856 G St, Bldg 79  
Wright-Patterson AFB, OH 45433-7400

SUBJECT: Consultative Letter, AFRL-HE-WP-CL-2001-0004, QA/QC Audit Report for the Study of Perchlorate Pharmacokinetics and Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans (CRC Protocol #628).

1. This letter describes the Quality Assurance/ Quality Control (QA/QC) audit for the Study of Perchlorate Pharmacokinetics and Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans (CRC Protocol #628) performed by Dr. Monte Greer and associates at Oregon Health Sciences University. The letter also describes the data and QA/QC audit from the perchlorate assays performed at the Operational Toxicology Branch of the Air Force Research Laboratory using samples from CRC Protocol #628. It also describes which data from the CRC Protocol # 628 were used to develop the physiologically-based pharmacokinetic (PBPK) model for predicting the inhibition of thyroid iodide uptake after exposure to perchlorate ( $\text{ClO}_4^-$ ) in the human.
2. Data from three human studies were available for use in the human PBPK modeling of perchlorate. The studies were conducted by Drs. Lewis Braverman, Monte Greer and Georg Brabant.
  - a. Of those studies, data from Drs. Greer and Brabant were used in the model. The data in the current human PBPK model were limited to serum and urine perchlorate concentrations and thyroid radioiodide uptake measurements (available from Greer's study only). Statistical analysis of the thyroid hormone measurements was performed but the data were not used in

modeling. The thyroid hormone and iodine data are expected to be utilized in future development of a thyroid hormone model.

b. Original records from the Brabant study could not be obtained; therefore the data could not undergo QA/QC. However, serum and urine perchlorate values from Brabant's high dose group (12mg/kg-day) were used as supporting data because they provide a much higher dose level than those evaluated in Greer's study.

c. Data from Braverman's study could not be used in PBPK model development. Subjects were not instructed to drink perchlorate at established times. Due to the rapid elimination of perchlorate, serum concentrations fluctuate significantly with the dosing schedule. In addition, original records from Braverman's study were not available and sample sequences were questionable.

3. The following are responses to the Toxicology/Regulatory Services, Inc. (TRS) QA/QC Audit Report (Attachment 1) as they pertain to the human PBPK model only. General responses pertaining to the quality of the data are discussed in Attachment 2.

a. Paragraph II D. The serum chemistry, CBC, drug test and preliminary urinalysis data were not used for PB/BK modeling.

b. Paragraph III. A. The dosing dates for VM were 2 May through 15 May 2000. This does not affect the PBPK model.

c. Paragraph III. B. The T<sub>4</sub> analyses from subject JS2 on E14 at 8 AM, noon and 5 PM were excluded from statistical analysis of T<sub>4</sub> and will be excluded from future human hormone modeling.

d. Paragraph III. B. The T<sub>4</sub> analysis from subject JF on E14 at noon was excluded from statistical analysis of T<sub>4</sub> and will be excluded from future human hormone modeling.

e. Paragraph III. B. The T<sub>4</sub> analysis from subject TO on E14 at 8 AM was excluded from statistical analysis of T<sub>4</sub> and will be excluded from future hormone modeling.

f. Paragraph III. B. The thyroid function test was not performed for DR at 8 AM on E4; however, the data from DR will be used in future human hormone modeling because thyroid function was assessed before on previous days and at noon on day E4.

g. Paragraph III. B. The thyroid function test was not performed for JF at noon on E2; however, the data from JF will be used in future human hormone modeling because thyroid function was assessed at 8 AM and at 5 PM on day E2.

h. Paragraph III. B. The thyroid function test was not performed for CB at 8 AM on E1; however, the data from JF will be used in future human hormone modeling because thyroid function was assessed at 4 PM on day E1 and at noon on day E2.

- i. Paragraph III. B. The thyroid function test was not performed for QY at noon on day E1; however, the data from QY will be used in future human hormone modeling because thyroid function was assessed by the base test and at 4 PM on day E1.
  - j. Paragraph III. B. The thyroid function test for SK was performed for the noon day E1 sample, but the times were incorrectly entered upon the label. The data from SK will be used in future human hormone modeling because thyroid function was actually tested at noon on day E1.
  - k. Paragraph III. B. The thyroid function tests for GB were performed for the 8 AM and the noon day E4 samples, but the times were incorrectly entered upon the labels. The data from GB will be used in future human hormone modeling because thyroid function was actually tested at 8 AM and at noon on day E4.
  - l. Paragraph III. B. The incorrect dates and times recorded for subject DH were discovered and the times and dates corrected. Therefore, the data from GB will be used in future human hormone models.
  - m. Paragraph III. C. 1. Neither the serum iodine data nor the urinary iodine data were used in developing the human PB/PK model to date. The current human model does not simulate endogenous iodide and hormones. Also dietary iodide intake was not controlled. Therefore, the data could not be used for development of the kinetic model. The urinary iodine data may be used in a future hormone model as an estimate of dietary iodide intake.
  - n. Paragraph III. D. The serum chemistry data were not used in developing the human PBPK model.
4. The following are responses to outstanding issues from Matt Schneider's final audit report (Attachments 3).
- a. Dosing solution:
    - (1) Three samples of the water used to make dosing solutions were tested for perchlorate. Labels from the bottled water were provided with sample records; all appear to be from the same company. Three control water samples were sent to the Operational Toxicology Branch of the Air Force Research Laboratory (HEST) and were analyzed for perchlorate. None were found to contain perchlorate. (Method detection limit for drinking water is less than 1 ppb.)
    - (2) Perchlorate standards used for the calibration curves were not prepared from the same lot number as the perchlorate used in the dosing solutions for two reasons:

(a) Calibration standards were prepared at the laboratory in which perchlorate concentration was being analyzed (AFRL); dosing solutions were prepared by Greer's group. These laboratories work independently of each other.

(b) Potassium perchlorate capsules were used to prepare dosing solutions. When preparing the stock solutions, it was noticed by Greer's group that some filler would not dissolve. HEST was asked to analyze the dosing solutions to verify that the filler did not affect the concentration and to make sure the solutions were made correctly. Ammonium perchlorate solid (powder) was used to prepare the calibration standards. Both perchlorate salts ( $KClO_4$  and  $NH_4ClO_4$ ) are extremely soluble in water. The purpose of analyzing the dosing solutions with ion chromatography was to verify that the solutions prepared from the  $KClO_4$  tablets were accurate. It would be inappropriate to use the  $KClO_4$  capsules for the calibration standards.

(3) The data for AB1 were not used in the human iodide inhibition model nor will it be used in future models because the subject may have been incorrectly dosed.

(4) The failure to weigh each subject every day is not considered reason by our laboratory to exclude the data from the human model. Body weight measurement throughout the study was not specified in the study protocol and therefore was not conducted. The variance in weight is not thought to be significant over the 14 day dosing period. Therefore, the body weights obtained during the subject's preliminary visits were used in the PBPK model.

b. Serum Data:

(1) AB2: Despite efforts to purify biological samples, some contaminants are still present when the samples are injected on the column. When these samples are run at low dilutions (1:20 in serum) they can leave contaminants on the exchange sites in the column. This results in a shift in retention time, which increases with the number of samples. This change in retention time is accounted for by running a perchlorate standard after every ten samples to record the retention time shift and to ensure that the peak measured in the sample is perchlorate. When the shift becomes significant the column is cleaned.

(2) The Dr. Goodman and coauthors' reply to the TRS report (Attachment 2) explained the resolution of missing data.

(3) RC: A chromatograph was found in the folder which was supplied to Mr. Schneider.

(4) SK: The serum results for subject SK were verified using the chromatographs and calibration curves provided to Mr. Schneider. The corrected spreadsheet was used for modeling.

c. Urine Perchlorate:

- (1) DR: The chromatogram for sample DR31 was found in the file provided to Mr. Schneider. Samples DR19 and DR25 were verified from the chromatographs and calibration curves. No discrepancy was found when calculated with the spreadsheet and verified by hand calculation.
- (2) MA: Chromatograms were verified by an experienced chemist. Basic chromatography requires that separation of eluting peaks be accomplished before quantitation. Therefore, the first sample mentioned by Matt Schneider was run a second time to separate the peaks. When only perchlorate was quantitated, the area was much smaller than the combination of perchlorate with the interference peak. An independent chemist reviewed this work and verified analysis.
- (3) NR: Due to overlapping peaks, a second run was performed on NR20. The correct chromatogram and calibration curve were provided to Matt Schneider, which resulted in a concentration of 8.29 ppm. This value was used in the model. The difference between the value calculated by Mr. Schneider (7.74 ppm) and ours (8.29 ppm) is insignificant for modeling purposes.
- (4) SK: Both chromatograms were available. When samples were spiked with perchlorate, it was clear that the peak at 7.03 was not perchlorate but rather an interference peak. The perchlorate spike eluted at 6.8 in sample SK50. The peak Matt Schneider mentioned eluted at 7.03. Perchlorate was not present in the original SK50 sample.

4. For further information, please contact me by phone: (937) 255-5150 ext. 3195, fax: (937) 255-1474 or e-mail: elaine.merrill@wpafb.af.mil.

*Elaine A. Merrill*  
ELAINE A. MERRILL  
Operational Toxicology Branch

Attachments:

1. Toxicology/Regulatory Services, Inc. April 11, 2001. Study of Perchlorate Pharmacokinetics and Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans CRC Protocol #628. QA/QC Audit Report.
2. Goodman,G., Previti, M. and Pino, S. April 26, 2001. Response to the TRS QA/QC Audit Report of April 11, 2000.
3. Schneider, M.G. October 28, 2000. Perchlorate Data Audit Report.
4. Eldridge, E and Clewell, R. Nov. 6, 2000. Response to Matt Schneider's Perchlorate Data Audit Report dated October 28, 2000.

5. Pino, S. Serum and Urine Iodine Results from Greer's Study
6. Thyroid Function Data from Greer's Study
7. Radioiodide Uptake Measurements from Greer's Study
8. AFRL/HEST Serum and Urine Perchlorate Results from Greer's Study

1<sup>st</sup> Ind, AFRL/HEST

10 May 2001

MEMORANDUM FOR US EPA

ATTN: MS. ANNIE JARABEK

This letter report has been coordinated at the branch level and is approved for release.



Richard R. Stotts, DVM, Ph.D.  
Chief  
Operational Toxicology Branch  
Human Effectiveness Directorate

**Attachment 1**

**Study of Pharmacokinetics and Inhibition of Radioactive Iodine Uptake (RAIU) by the  
Thyroid in Humans CRC Protocol #628**

**QA/QC Audit Report**

**Toxicology/Regulatory Services, Inc.**

**April 11, 2000**



TOXICOLOGY/REGULATORY SERVICES, INC.

April 11, 2001

via UPS

Ms. Jacqueline Patterson  
Peer Review Program Manager  
Toxicology Excellence for Risk Assessment  
1757 Chase Avenue  
Cincinnati, OH 45223

Re: Study of Perchlorate Pharmacokinetics and Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans (CRC Protocol #628)

Dear Jacqueline:

As we discussed, enclosed are the original and one copy of the QA/QC Audit Report for the referenced study. As you requested, one copy of this report has been sent to Mr. Michael Girard, three copies have been sent to Dr. Rick Pleus and two copies have been sent to Dr. David Mattie.

It should be noted that a final report or manuscript for this study was not available at the time of the audit; therefore, the values used for the PB/PK model were not verified against the raw data values. Also, as noted in the audit and in discussions with Dr. Gay Goodman, there are known errors and/or omissions in the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet (commonly referred to as the "Aaron database"). Since this spreadsheet was to be used to document the transfer or shipping of samples to the various laboratories at the time of shipment, it would not be appropriate to reconstruct this information and modify this spreadsheet at this time. In addition, since the use of Excel in collecting this information precludes the documentation of when the information was entered or the tracking of modifications to the information entered, modifications to this spreadsheet would not be appropriate. Noting that errors/omission had occurred should be sufficient documentation.

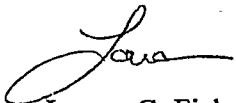
Ms. Jacqueline Patterson

April 11, 2001

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If you have any questions, please contact me.

Kindest regards,



Louan C. Fisher  
Senior Scientist/QA Auditor

Enclosures

cc: Mr. Michael F. Girard, Aerojet  
Dr. Rick Pleus, Intertox  
Dr. David R. Mattie, Armstrong Laboratory

**TRS**

TOXICOLOGY/REGULATORY SERVICES, INC.

**Study of Perchlorate Pharmacokinetics and  
Inhibition of Radioactive Iodine Uptake (RAIU) by the  
Thyroid in Humans  
CRC Protocol #628**

**QA/QC Audit Report**

Prepared for:

**Perchlorate Study Group (PSG) and  
Toxicology Excellence for Risk Assessment (TERA)**

Prepared by:

**Toxicology/Regulatory Services, Inc.**

**April 11, 2001**

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**Study of Perchlorate Pharmacokinetics and  
Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans  
CRC Protocol #628**

**QA/QC Audit Report**

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**Study of Perchlorate Pharmacokinetics and  
Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans  
CRC Protocol #628**

**QA/QC Audit Report  
April 11, 2001**

**I. Background**

Toxicology/Regulatory Services, Inc. (TRS) was contracted to audit the documentation for protocol/study conduct, and the accuracy and reliability of the thyroid function data and the serum and urine iodine measurements of the subject study, in support of a PB/PK model that is to be submitted to the U.S. EPA.

TRS conducted a review of the study documentation to determine that the protocol was followed as written. During this initial review, some discrepancies were noted and discussed with the study co-investigator. Many of these discrepancies were addressed adequately by the study co-investigator and, therefore, are not included in this report.

Following a detailed review of the protocol-required elements, scientists from Wright Patterson Air Force Base working on the PB/PK model, along with the individuals at Intertox and the Greer study investigators, prioritized the data to be reviewed in support of the PB/PK model. TRS was instructed to audit the thyroid function data and the serum and urine iodine measurements. In addition, the serum chemistry, hematology (CBC), drug testing and preliminary urinalysis data were evaluated. The study co-investigator simultaneously created a combined database containing all data from laboratory-generated, study-specific spreadsheets. This database was intended to document the actual study design and conduct, and may serve to answer some or all of the discrepancies identified by TRS between protocol-required elements and actual data collected. The contents of this combined database were not audited; however in some instances, the notes documented in this database were referenced in this audit as possible explanations for discrepancies found in the data. The information provided by this database may be used to support the integrity of the study conduct.

Although considered a single study, there were actually two different study designs identified as "main study" and "uptake only (short) study". The protocol identified as "CRC Protocol #628, IRB #5798" was used for the main study design. For the uptake only (short) study, the protocol identified as "GCRC Protocol for 2<sup>nd</sup> Perchlorate Study, 5/3/00" was utilized. Both study designs required exposure of the subjects to perchlorate for 14 days; the uptake only (short) study was included to determine a NOEL for RAIU and, therefore, this study design measured fewer parameters at fewer time intervals.

Two subjects in the main study (AB2 and GB) and one subject in the uptake only (short) study (RB2) were exposed to perchlorate for 15 days rather than 14 days because the <sup>123</sup>I did not arrive as scheduled on, Exposure Day 14 (E14). Subject SV from the main study also was exposed to perchlorate for 15 days because she was out of town on E14. The schedule for these four subjects was shifted forward one day beginning on E14 (see tabs for details).

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Since changes to the protocol were not documented by protocol amendments, communications between investigators or between the investigators and the laboratories were utilized as documentation of modifications to the original protocols. Specific memos and communications used in this manner are clearly identified, where appropriate, throughout this report.

In addition, there are several instances in this report where it is recommended that additional explanations or documentation be included with the raw data for future reference. The purpose of these recommendations is to encourage the investigators and sponsors to keep a complete record of the study, including explanations of discrepancies, in one location, to aid understanding of the study design and conduct.

**II. Specific QA/QC Procedures**

The following outline documents the specific procedures that were followed for the QA/QC review of the data supplied to TRS for adherence to protocol, and the results of the thyroid function tests and serum and urinary iodine measurements.

**A. Protocol requirements and study documentation review (Tab 1)**

A review of the study documentation was conducted to determine that the protocol was followed as written. In addition, the auditor was looking for documentation that the blood and urine samples required by protocol were collected. This documentation, in conjunction with the analyses of these samples, adds to the validity/authenticity of the data. The following documentation found in each subject's folder was reviewed:

1. OHSU Subject Record (which was sanitized to provide only subject ID, body weight and dose calculation, and to exclude several preliminary protocol-required elements, such as physical examination, thyroid palpation and drug screen results).
2. OHSU Consent Form.
3. Subject Study Log Forms documenting perchlorate ingestion and urine collections.
4. OHSU printout documenting administration of the  $^{123}\text{I}$ .
5. OHSU Nursing Flow Sheet (NFS) - a form that identified the protocol-required elements with an "x" in each pertinent box, and which documented that the protocol element was followed by the nurse placing a

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handwritten “✓” next to the “x”. The nurses also used this form to record body weights and other study notations, including the initials and/or signatures of the nurses completing the form.

Discussions with the study co-investigator revealed that the documentation included on the NFS may not be complete because it was never intended to be the raw data documentation of sample collection. Therefore, additional documentation was provided to the auditor in the form of Excel spreadsheets. The spreadsheets supplied to the auditor were identified as “Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls” (created February 23, 2001) and “USAF.XLS” (created June 25, 2000). The origin of these spreadsheets is described below.

In a memo dated March 1, 2001, the investigator and co-investigator explained to the auditor that in addition to documenting the medical record number and sample collection date and time directly on the sample labels, the nurses collecting the samples also documented this information on “lab slips”. The lab slips can be considered the raw data documentation of the time samples were drawn. These lab slips were not supplied to the auditor; however, two separate Excel spreadsheets identified above were made available. These spreadsheets contain the transcribed information from the lab slips and sample labels. Documentation for verifying the correct transcription of data from the lab slips to the spreadsheets was not available in the raw data. However, the following information on sample handling and recording was provided:

For samples shipped for perchlorate analysis or urinary and serum iodine analyses, the lab slips accompanied the labeled samples to a central area where the information from the lab slips and sample labels was entered into the Excel spreadsheet identified as “Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls”. These samples then were shipped to the appropriate laboratory for perchlorate or iodine analyses. This Excel spreadsheet contains the following headings: medical record number, sample type (urine, serum), sample date, sample time, analysis performed and volume in mls (for urines only).

In addition, samples analyzed at the OHSU laboratory for thyroid function, clinical chemistry, hematology (CBC), drug testing and preliminary urinalysis also had lab slips that accompanied the labeled specimen containers. The OHSU laboratory technician entered the data from the lab slips and sample labels into the laboratory information system (LIS) prior to analysis or delivery to referral labs, where appropriate. Documentation was provided to this auditor verifying that the results reported in the Excel spreadsheet, USAF.XLS, were derived directly from the laboratory’s raw data database in the LIS using SQL (Structured Query

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Language), and that a file transfer process (FTP) was used to transfer the data to the auditor. This documentation also indicated that there was no manipulation of the laboratory data in either the SQL or the FTP process. Therefore, the Excel file, USAF.XLS, created directly from the equipment that performed the analysis, also was used to verify sample collection at the appropriate protocol-required interval. The Excel spreadsheet, USAF.XLS, contained information on subject identification, sample collection date, sample collection time, test name, test results and notes.

At this time, the procedures described above were supplied to the auditor both verbally and in writing, but were not documented in the raw data that was made available to the auditor. It is suggested that the written documentation provided to this auditor be included with the raw data to explain these procedures.

To verify that the required samples were collected when this information could not be located in the subjects' folders, the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls and USAF.XLS Excel spreadsheets (for serum and urinary iodine and thyroid function entries only) were used. No attempt was made to audit all of the entries recorded in the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet. However, two subjects from the main study (KN and CB) and two subjects from the uptake only (short) study (GH and SE), were randomly selected for review of all their data points entered in the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet for serum and urinary iodine sample collection. The additional review was included to verify that this database accurately documented sample collection.

The results of the protocol requirements and study documentation review are presented in a table that lists all the protocol requirements and indicates whether each subject's folder, as received by TRS, and/or the spreadsheets identified above, document collection of each protocol-required element (Tab 1).

**B. Thyroid function (serum) data (Tab 2)**

TRS conducted a complete review of the thyroid function data for each subject. The thyroid function analysis data were provided in each subject's folder and in the USAF.XLS Excel spreadsheet made available by the OHSU laboratory and described above. The data in the subjects' folders are in the form of printouts from OHSU with the date and time of blood collection listed on each printout. The date and time of blood collection, as noted on these sheets, were verified against the specified date and time of blood collection required by the protocol. Initially, the audit involved reviewing the printouts in the subjects' folders; however, this revealed that all of the data were not available in this form. Therefore, the Excel spreadsheet, USAF.XLS, was used to verify all of the

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protocol-required thyroid function analyses data. Neither the USAF.XLS Excel spreadsheet nor the printouts in the subjects' folders included the date and time of analysis, so an additional Excel spreadsheet was created from the OHSU database to verify that this information was available. This additional spreadsheet was used to verify that a field for date and time of analysis was present in the OHSU database; however, it was not used for any further auditing purposes.

The protocol indicates that one would expect to find a value for thyroid hormones Total T3 (TT3), Total T4 (TT4), Free T4 and TSH; antibodies to thyroid peroxidase (Anti-TPO); and antibodies to thyroglobulin (Anti-TG) at each specified interval. However, a memo from Dr. Gay Goodman to Dr. Fisher, dated February 7, 2000, indicates that the two antibodies, Anti-TPO and Anti-TG, were to be measured only twice: at the preliminary screening visit and on Postexposure Day 15. Therefore, this memo was considered to be an amendment to the approved protocol.

To verify that the analyses were available for each subject, the following assumptions were made:

1. The analyses for antibodies to thyroid peroxidase were documented as "thyroid peroxidase Ab" on the data sheets and "THYROID PEROX AB,SERUM" in the USAF.XLS Excel spreadsheet; and
2. The analyses for antibodies to thyroglobulin were documented as "thyroglobulin Ab" on the data sheets and "THYROGLOBULIN AB, SERUM" in the USAF.XLS Excel spreadsheet.

The results of this audit are presented in a table that includes all the protocol-required thyroid function parameters and the subject identifications (Tab 2). The table identifies the thyroid function parameters that were required by the protocol for each interval and indicates what parameters were available in the raw data. Also, any discrepancies between the date and time of blood collection, as required by the protocol and as recorded on the OHSU printout or USAF.XLS Excel spreadsheet, are noted in this table.

**C. Serum and urinary iodine data (Tabs 3 and 4)**

In the initial review of these data, TRS identified that the data were collected and analyzed using two different methods. Some of the data were recorded manually and calculations were performed using Excel spreadsheets prepared by the laboratory (herein identified as the "Iodine Calculations Excel spreadsheets"). Other data were recorded and calculated manually. TRS has a standard policy to audit 100% of all manually collected data; however, due to the large volume of

manually collected data and the time constraint for completion of the audit, it was determined that at least 20% of the data would be audited. The results of the audit of 20% of the data would determine if a full audit of these data were necessary.

Therefore, TRS chose nine subjects (approximately 20% of the population) for whom all of the data would be checked for accuracy of the manual transcriptions into the Iodine Calculations Excel spreadsheets and for the accuracy of the manual calculations. The formulas used in the Iodine Calculations Excel spreadsheets were confirmed visually. In order to check the accuracy of the calculations, TRS requested electronic copies of the Iodine Calculations Excel spreadsheets and copies of the hand-generated standard curves for the serum and urinary iodine measurements for the following nine subjects:

Subject ID	Set/ Group No.	Dose Level (mg/kg/day)	Uptake Only (Short) Study
JS1	03	0.5	
MA	06	0.5	
NR	03	0.1	
SG	08	0.1	
QY	03	0.02	
DC	08	0.02	
VM	11	0.1	X
RB2	09	0.007	X
EA	12	0.007	X

1. **General procedures for evaluation of serum iodine data (all subjects):**
  - a. Performed QA/QC for all serum iodine data using the hand-recorded raw data sheets, the hand-recorded standard curves and the Iodine Calculations Excel spreadsheets as appropriate.
  - b. Verified that all protocol-required samples were analyzed in duplicate.
  - c. Verified that all required repeat analyses, as noted on hand-recorded raw data sheets or Iodine Calculations Excel spreadsheets, were performed.
  - d. Utilized the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet, where possible, to verify sample collection for missing data analyses or to clarify discrepancies found in the raw data documentation.

Note: According to the protocol, serum iodine data analysis was not required for the uptake only (short) study.

**2. Procedures for evaluation of serum iodine data from the nine subjects identified above:**

- a. Checked all %T values for the standards of 0, 0.02, 0.04 and 0.06 µg I against the hand-recorded raw data sheets and the hand-recorded standard curve sheets.
- b. Verified all µg I values recorded on the hand-recorded raw data sheets against the hand-recorded standard curves.
- c. Verified all manually calculated Total I µg/dL values (µg I/sample size).
- d. Verified the Iodine Calculations Excel spreadsheets for subject DC (the only subject above where the results were analyzed using Excel) as described for the urine analysis data (see below).

**3. General procedures for evaluation of urinary iodine data (all subjects):**

- a. Performed QA/QC for all urinary iodine data using the electronic copy of the Iodine Calculations Excel spreadsheets and the hand-recorded raw data sheets.
- b. Verified that all protocol-required samples were analyzed in duplicate.
- c. Verified that all required repeat analyses, as noted on the Iodine Calculations Excel spreadsheets or the hand-recorded raw data sheets, were performed.
- d. Checked each subject's folder for documentation that the urine samples were collected, and confirmed that the dates and times corresponded to the entries on the Iodine Calculations Excel spreadsheets and hand-recorded raw data sheets.

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Note: The 24-hour urines collected on Postexposure Day 3 to Postexposure Day 4 (P3/P4) and Postexposure Day 4 to Postexposure Day 5 (P4/P5) were not analyzed based on a memo dated March 29, 2000 from Dr. Gay Goodman to Dr. Dave Mattie.

Also, the uptake only (short) study had only 24-hour urine collections for Baseline and Exposure Day 14 to Postexposure Day 1 (E14/P1) intervals.

**4. General procedures for evaluation of urinary iodine data from the nine subjects identified above:**

- a. Checked all entries on the Iodine Calculations Excel spreadsheets for set, tube #, date, time, %T, amt (mL) and all %T values for the standards of 0, 0.02, 0.04, and 0.06  $\mu\text{g}$  I against the hand-recorded raw data sheets.
- b. Verified Total I  $\mu\text{g}/\text{dL}$  values:
  - Derived the following equation from the Iodine Calculations Excel spreadsheets:  
$$\text{Total I } \mu\text{g}/\text{dL} = \mu\text{g I} * 100 * (1/\text{amt in mL}).$$
  - The “Total I  $\mu\text{g}/\text{dL}$ ” value was calculated manually for one or two intervals.
  - The actual calculation for the “Total I  $\mu\text{g}/\text{dL}$ ” value in each cell of the Iodine Calculations Excel spreadsheets was confirmed visually.
- c. Verified  $\mu\text{g I}$  values:
  - Derived the following equation from the Iodine Calculations Excel spreadsheets:  
$$\mu\text{g I} = (%\text{T} - b)/\text{slope}.$$
  - The “ $\mu\text{g I}$ ” value was calculated manually for one or two intervals.
  - The actual calculation for the “ $\mu\text{g I}$ ” value in each cell of the Iodine Calculations Excel spreadsheets was confirmed visually.
- d. Verified values in the Results and Final Results tables:
  - Derived the following equation from the Iodine Calculations Excel spreadsheets:  
$$\% \text{ diff} = (\mu\text{g/dL I 1})/(\mu\text{g/dL I 2}).$$
  - The “% diff” value was calculated manually for one or two intervals.

- The actual calculation for the “% diff” value in each cell of the Iodine Calculations Excel spreadsheets was confirmed visually.
- Derived the following equations from the Iodine Calculations Excel spreadsheets:  
$$\text{Ave (of 2)} = [(\mu\text{g/dL I 1}) + (\mu\text{g/dL I 2})]/2.$$
- The “ave (of 2)” value was calculated manually for one or two intervals.
- The actual calculation for the “ave (of 2)” value in each cell of the Iodine Calculations Excel spreadsheets was confirmed visually.

**D. Serum chemistry, hematology (CBC), drug test and preliminary urinalysis data (Tab 5)**

In communications with the study investigators and those developing the PB/PK model, it was determined that a QA/QC audit was not necessary for serum chemistry, CBC, drug test and preliminary urinalysis, as these parameters are not required for the PB/PK modeling. However, since these data were readily available from the OHSU printouts in the subjects' folders and in the USAF.XLS Excel spreadsheet used for the review of the thyroid function data, it was determined that documenting the presence of these data points in an audit table would be beneficial and provide a more complete QA/QC (Tab 5).

Serum chemistry:

The protocol specified that thyroxine-binding globulin was a test required for the serum chemistry profile. Since this parameter was routinely analyzed separately from the other serum chemistry parameters, the presence of this analysis was documented separately in the table (Tab 5).

**E. Data not audited:**

An earlier audit was performed by M. G. Schneider. Much of the data not audited by TRS were audited by Mr. Schneider.

1. The RAIU results were not reviewed because M. G. Schneider reviewed them in the previous QA/QC audit.
2. Perchlorate dosing documentation was not reviewed because M. G. Schneider reviewed it in the previous QA/QC audit.
3. The serum and urine perchlorate analyses were not reviewed because M. G. Schneider reviewed them in the previous QA/QC audit.

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4. Urine creatinine data were not reviewed because these data were not listed as necessary for the PB/PK model. In addition, these data were not located in any of the files sent to TRS. If the sponsor requests a QA/QC audit of these data, it will be necessary to obtain the appropriate data files.

### **III. Results**

#### **A. Protocol requirements and study documentation review (Tab 1)**

The Protocol Requirements and Study Documentation Review Table (Tab 1) shows that there are a number of discrepancies between protocol requirements and documentation showing that the protocol was followed. All shaded areas on the table indicate missing documentation in the subjects' folders. When the Excel spreadsheets "Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls" and "USAF.XLS" were reviewed for this documentation, many of these blanks could be explained. However, it was found that the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet also contained missing or incomplete information. For example, approximately one half of the subjects had at least one entry that did not include the sample time. On many occasions, the samples were entered into the Excel spreadsheet in duplicate and, in one instance for subject CB (a subject randomly selected for review of all data points), the entry of one sample was not included in the Excel spreadsheet even though a sample was collected and sent for analysis. In addition, there was an overall inconsistency in completing documentation in the subjects' folders that verified that protocol-specified parameters were collected. However, when using the information provided in the subjects' folders in conjunction with the two Excel spreadsheets provided to TRS, the verification of sample collection for the majority of the protocol-specified parameters could be determined.

The dates listed for the 14-day exposure period for subject VM [uptake only (short) study] in the co-investigator's database differed from the dates listed in the subject's folder. The documentation in the subject's folder indicates that dosing was between May 1 and 14, 2000; however, the co-investigator's database lists the dosing period as May 1 through May 15, 2000. This discrepancy should be resolved prior to the inclusion of the data for this subject in the PB/PK model.

#### **B. Thyroid function (serum) data (Tab 2)**

The Thyroid Function (Serum) Data Table (Tab 2) indicates that the majority of the protocol-specified analyses were performed at each protocol-required interval. Based on a memo dated February 7, 2000, the number of analyses for antibodies to thyroid peroxidase (Anti-TPO) and antibodies to thyroglobulin (Anti-TG) were reduced to only two intervals, Preliminary and P15. The table reflects this

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modification to the protocol. However, there were several instances where the preliminary analysis for Anti-TG was not performed as required. Based on a memo from Dr. Monte Greer to Dr. Gay Goodman, the testing laboratory incorrectly ordered an analysis for thyroglobulin, instead of Anti-TG. This resulted in a protocol deviation for these missing parameters.

There were five occurrences where the results of the Free T4 analysis were originally reported but then subsequently withdrawn (see Note R in Tab 2). These samples were to be reanalyzed, but the reanalysis was never performed; therefore, verification is needed to ensure that these values are not included in the study results or used for the PB/PK model.

Also, on approximately 30 raw data sheets there is a note indicating "Free T4 test performed at: Quest Diagnostics..." (e.g. see subject AB1's folder). As stated in Tab 2, the original raw data sheets from Quest Diagnostics were not provided to this auditor (see Note Q). The results obtained from Quest Diagnostics were included in the USAF.XLS Excel spreadsheet; however, without the original analyses from Quest Diagnostics, the values could not be verified.

A total of six samples were not analyzed as required by the protocol (indicated as the shaded areas in Tab 2 for subjects DR, JF, CB, QY, SK and GB). Also, for subject DH there were four separate time intervals where the raw data reveals incorrect documentation of the date of sample collection. Proper verification prior to including these results in the PB/PK model would be appropriate.

**C. Serum and urinary iodine data (Tabs 3 and 4)**

The hand-recorded raw data sheets containing the serum and urinary iodine levels were very difficult to read and the data were not organized in a consistent manner, which made tracking the data very difficult. Also, some raw data sheets did not identify the samples as urine or serum.

Upon review of the raw data, it did not appear that a consistent procedure for reanalysis of samples was followed, or that there was consistent documentation to explain when a sample needed to be reanalyzed. It was observed by the auditor that repeat analysis of samples was performed when: 1) %T was too high or too low; 2) the % difference on the Excel Results Table was flagged as being too great; or 3) samples were rerun without the reason or explanation of the rerun documented in the raw data. It was explained to the auditor that for many of the instances where repeat analyses were located, but an explanation was not included in the raw data, the samples were reanalyzed for one of the following reasons: 1) questionable %T values; 2) questionable % differences in the results; 3) Mike Previti, who was recently employed by the laboratory, performed additional runs to test the accuracy of his procedure and/or to gain confidence in

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the method; or 4) to test a preliminary version of the Iodine Calculations Excel spreadsheet being developed. Additional documentation should be included in the raw data, or attached to this audit report to explain: 1) the rationale for performing repeat analyses; and 2) the acceptable range for % difference.

There also are inconsistencies in the procedures followed when performing a reanalysis of a particular sample. In some instances the rerun was performed in duplicate for each sample; however, in most cases, the rerun was performed only once.

After a sample was reanalyzed, the criteria used to determine which values were included in the Final Results Tables may not have been appropriate and may need further explanation. In most instances, it appears that the two values having the least % difference were used. It was not possible to determine the final values used in the results for the analyses calculated manually, as the Final Results Tables were not supplied to this auditor.

### **1. Serum iodine data (Tab 3)**

The results for most protocol-required intervals were located. The analyses for eleven samples were not located.

Many analyses were run in duplicate; however, only one run could be located for eight of the subjects (one third of the study population). There were additional isolated instances when only one run was located in the raw data.

The majority of the manual transcriptions and calculations reviewed for the selected subjects were accurate; however, for one subject (QY) the manual calculations were performed by a different technician and there appear to be minor discrepancies in the procedures used when compared to the manual calculations performed by the other technician (see Tab 3 for detailed explanation). According to the laboratory, these minor discrepancies did not affect the final calculated results.

On many occasions, urine controls (UC5, UC7) instead of serum controls were run at the end of a run for the serum iodine analyses. This should be explained. Also, when a standard was run for which a value was not acceptable, the standard from a previous run was used to determine the standard curve. Please consider whether this is an acceptable procedure.

**2. Urinary iodine data (Tab 4)**

The results for most protocol-required intervals were located. The analysis of only one sample was not located.

Most samples were analyzed in duplicate; however, there were some samples that appear to have been analyzed only once.

For the majority of the intervals, each individual urine sample collected from a subject was analyzed; however, for Exposure Day 14 to Postexposure 1 (E14/P1), Postexposure Days 2 to 3 (P2/P3) and Postexposure Days 14 to 15 (P14/P15), only one sample, identified as "24/hour," was analyzed. In communications between Dr. Gay Goodman and Dr. David Mattie on February 28, 2000, and March 13, 15 and 29, 2000, the issue of "pooling of urine samples" was addressed. These communications discussed pooling the samples collected throughout these 24-hour periods and these communications were used for the purpose of this audit as amendments to the approved protocol; therefore, the table behind Tab 4 reflects the modified schedule for pooled urines.

The Subject Study Log Forms for those subjects in the uptake only (short) study did not include a record of the urine collection times or volumes. According to a communication from the study co-investigator, the subjects in the uptake only (short) study were required to record the time of urine collection, but not the volume since the urine was pooled over a 24-hour period. As stated above, the time of urine collection could not be found in the raw data.

**D. Serum chemistry, hematology (CBC), drug test and preliminary urinalysis data (Tab 5)**

As can be seen in the table (Tab 5), there are only three instances where the protocol-required parameters could not be located. These involved one serum chemistry analysis, one CBC analysis and one drug test. All urinalysis results were located.

Additional serum chemistry analyses performed at the baseline time interval were located for all subjects in the main study. This analysis was not required by the protocol. Please include, in the raw data, a reason for performing this additional analysis.

The majority of the protocol discrepancies found in the raw data involved the thyroxine-binding globulin analysis, which was to be performed as part of the serum chemistry profile. On four occasions in the main study, this analysis was

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not performed at the required time interval. In the uptake only (short) study, only one subject (LB) had this analysis performed as required. The organization of the raw data indicates that this analysis was not performed in conjunction with the other serum chemistry analyses. This may explain the inconsistencies that resulted in this protocol deviation.

Additional discrepancies and comments can be found on the table and in the notes in Tab 5.

**IV. Conclusion**

There was a basic inconsistency in the documentation of sample collection. There were several different methods used for documentation of sample collection: NFS, lab slips (not provided to this auditor), Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet (for urine and serum samples collected for iodine and perchlorate analyses) and the USAF.XLS Excel spreadsheet (used for the thyroid function data, pregnancy test, serum chemistry, CBC, drug test and preliminary urinalysis results). Although documentation of collection for most of these samples can be located in one or more of these records, the documentation of collection should have been more consistent. Also, as noted above, some of this documentation of sample collection was provided in the form of laboratory-generated Excel spreadsheets. There is general concern when using Excel spreadsheets for raw data documentation because the information in the spreadsheet can be altered without the proper tracking of changes that should accompany any raw data collection procedure. Based on the explanation provided to this auditor of how the samples were collected, it would appear that the raw data for documentation of sample collection are the lab slips. Additional communications with the study co-investigator indicate that these lab slips have been retained; however they are not filed in a consistent manner to facilitate an audit.

There was no documentation of chain of custody for the samples that were shipped to facilities other than the laboratory where the collection of the sample occurred.

Some discrepancies were found between the data results or protocol parameters identified behind the tabs of this report and those results noted in the database created by the study co-investigator. In many of these cases, TRS could not locate data for certain intervals and the co-investigator's database indicated that these data exist. Many of these discrepancies involve the suspected misidentification of samples in the documentation of sample collection or in the analyzed results. These suspected misidentifications have been detailed in this report and should be verified prior to utilizing the corresponding results in the final PB/PK model.

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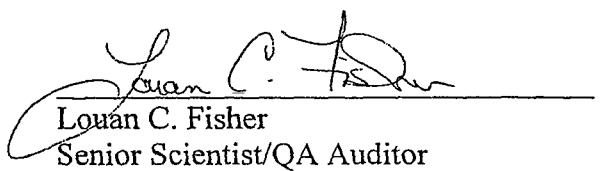
Additional documentation should be included in the study records or as a response to this audit to clarify the inconsistencies noted in the serum and urinary iodine data analyses. This documentation may include, but not be limited to, an explanation of the rationale for reanalyzing samples and the criteria used to determine what values were included in the Final Results Tables when a reanalysis was performed.

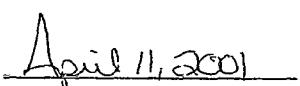
The review of the serum iodine data from approximately 20% of the subjects revealed that, from approximately 250 possible data points, transcription and calculation errors occurred less than 1% of the time. The review of the urinary iodine data from approximately 20% of the subjects revealed that, from approximately 400 possible data points, no transcription or calculation errors occurred; however, two errors were noted that involved an incorrect formula for % difference in the Iodine Calculations Excel spreadsheet. Errors that did not affect the results used in the PB/PK model were not included in the percentages of errors stated above (e.g. dates, times, sample identification or set numbers).

Based on the low number of transcription and/or calculation errors affecting the total serum or urinary iodine results, TRS does not recommend conducting further auditing of these data.

Each discrepancy noted throughout this report should be addressed and corrections should be made to the raw data, as appropriate. Also, per standard practice, a central location for the archiving of all study raw data records should be established and documented.

In the final analysis, the combination of information presented in the protocol-driven tables supplied in this report and the co-investigator's database of actual study conduct, along with the corrections to the data and inclusion of additional documentation in the data records as described above, may permit a scientific reviewer to conclude that the data from this study are reliable and accurate enough to support the PB/PK modeling project. However, the impact of the previously contracted QA review of the dose calculations, RAIU results, urine and serum perchlorate data, and specimen chain of custody records also should be considered in this conclusion for data reliability.

  
Louan C. Fisher  
Senior Scientist/QA Auditor  
Toxicology/Regulatory Services, Inc.

  
April 11, 2001  
Date

**Tab 1**

**Study of Perchlorate Pharmacokinetics and Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans  
CRC Protocol #628**

**Protocol Requirements and Study Documentation Review (Tab 1)**

**Main Study**

Subject ID	Sex	Set/ Group No.	Dose Level (mg/kg/day)	Signed Consent Form	Phys. Ex. w/ Thyroid Palp, BW, Drug Screen	Pr UPT (F)	Pr Visit Blood 16cc	Baseline Visit Urine (vol)	Baseline Visit Blood 13cc	Baseline Visit BW	Baseline Visit RAI Dose Admin.	Comments	
--	--	Log/NFS Schedule SD#:	--	--	BW, D					SD0/1	SD1	SD1	--
AN	F	01	0.5	✓	BW, D							✓	✓
DR	M	02	0.5	✓	BW	N/a	21	✓	18			✓	No Subject Log
JS1	M	03	0.5	✓	BW	N/a, Q	21	✓	18			✓	
CW	F	04	0.5	✓	BW		21	✓	18			✓C	
TO	M	05	0.5	✓	BW	N/a	25	D	18			✓	
MA	M	06	0.5	✓	BW, D	N/a		D	18			✓	
AB1	F	07	0.5	✓	BW, D			D	18			✓	
RC	F	08	0.5	✓	BW, D				18			✓E	
RT	F-h	01	0.1	✓	BW	N/a, Q						✓	
NR	M	03	0.1	✓	BW	N/a	25	✓	18			✓	
KN	M	04	0.1	✓	BW	N/a	25	✓	18			✓	
JF	F	05	0.1	✓	BW	✓A	25	✓	18			✓	
RB1	M	06	0.1	✓	BW	N/a	25	D				✓	
AH	F	07	0.1	✓	BW			D	18			✓	
SG	F	08	0.1	✓	BW	✓A	25	✓	18			✓	
AB2	M	09	0.1	✓	BW	N/a	25	✓	18			✓	
SV	F-h	01	0.02	✓	BW	N/a, Q	21	✓	18			✓	
CB	F	02	0.02	✓	BW	✓A	21		18			✓C	
QY	M	03	0.02	✓	BW	N/a	21		18			✓	
DH	M	04	0.02	✓	BW	N/a	25	✓	18			✓	
JS2	M	05	0.02	✓	BW	N/a			18			✓C	
SK	F	06	0.02	✓	BW	✓A	21	✓	18			✓	
DC	F	08	0.02	✓	BW, B				18		✓B	✓	
GB	M	09	0.02	✓	BW	N/a	21	✓	18			✓	

Key: See "Notes to Protocol Requirements and Study Documentation Review Table (Tab 1)" following six pages of tables.

Main Study

Subject ID	Set/Group No.	Dose Level (mg/kg/day)	Dose Calc.	E1 Blood 13cc Noon	E1 Blood 13cc 4 pm	E1/E2 Urine 50cc	E2 BW	E2 Blood 20cc 8 am	E2 RAI Dose Admin.	E2 Blood 13cc Noon	E2 Blood 14cc 5 pm	E2/E3 Urine 50cc	E3 Blood 14cc 9 am
--	Log/NFS Schedule SD#:			--	SD6	SD6	SD6/7	SD7	SD7	SD7	SD7	SD7/8	SD8
AN	01	0.5	✓	18	✓	✓	✓	25	✓	18	19	✓	19
DR	02	0.5	✓	18	✓	✓	D	✓	25	✓	18	✓	18+
JS1	03	0.5	✓	18	✓	✓	D	✓	✓	10 F	✓	D	18+
CW	04	0.5	✓	18	✓	✓	✓	✓	25	✓	18	✓	18
TO	05	0.5	✓	18	✓	✓	D	✓	25	✓	18	✓	18
MA	06	0.5	✓	18	✓	✓	D	✓	25	✓	18	18	18+
AB1	07	0.5	✓	18	✓	✓	D	✓	25	✓	18	✓	18
RC	08	0.5	✓	18	✓	✓	D	✓	25	✓	18	✓	18
RT	01	0.1	✓	18	18	✓	✓	25	✓E	21	18+	✓	18+
NR	03	0.1	✓	18	✓	✓	✓	✓	25	✓	18	✓	18
KN	04	0.1	✓	18	✓	✓	✓	✓	25	✓	✓	✓	18
JF	05	0.1	✓	18	✓	✓	✓	✓	25	✓	✓	✓	✓
RB1	06	0.1	✓	18	10	✓	✓	25	✓	18	✓	✓	18
AH	07	0.1	✓	18	✓	✓	✓	✓	25	✓	18	✓	18
SG	08	0.1	✓	18	✓	✓	D	✓	25	✓	18	✓	✓
AB2	09	0.1	✓	18	✓	✓	✓	✓	25	✓	18	18	✓
SV	01	0.02	✓	18	✓	✓	✓	✓	✓	18	18+	✓	18+
CB	02	0.02	✓	18	✓	✓	D	✓	✓	✓	25	✓	18+
QY	03	0.02	✓	18	✓	✓	✓	✓	25	✓	18	✓	18+
DH	04	0.02	✓	18	18	✓	✓	✓	25	✓	18	✓	18
JS2	05	0.02	✓	18	✓	✓	✓	✓	25	✓	18	✓	18
SK	06	0.02	✓	18	✓	✓	D	✓	✓	✓	18	18	18
DC	08	0.02	✓	18	✓	✓	D	✓	✓B	25	✓	✓	18
GB	09	0.02	✓	18	✓	✓	✓	✓	25	✓	18	✓	18

Main Study

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Subject ID	Set/ Group No.	Dose Level (mg/kg/day)	E4 Blood 13cc 8 am	E4 Blood 13cc Noon	E8 Blood 13cc 8-11 am	E8/E9 Urine 50cc	E14 BW	E14 Blood 20cc 8 am	E14 RAI Dose Admin.	E14 Blood 14cc Noon	E14 Blood 14cc 5 pm	E14/P1 Urine 50cc
--	Log/NFS Schedule SD#:		SD9	SD9	SD13	SD13/14	SD19	SD19	SD19	SD19	SD19	SD19/20
AN	01	0.5	18	18	18 H	✓	✓	25	✓	18	18	18
DR	02	0.5	8 G	18	18	✓	✓	25	✓	18	18	✓
JS1	03	0.5	18	18	18	D	✓	25	✓	18	18	D
CW	04	0.5	18	18	18 H	D	✓	25	✓	18	18	✓
TO	05	0.5	18	18	18 H	D	✓	25	✓	18	18	D
MA	06	0.5	18	18	18	D	✓	25	✓	18	18	✓
AB1	07	0.5	18	18	18 H	D	✓	25	✓	18	18	✓
RC	08	0.5	18	18	18	D	✓	25	✓	18	18	✓
RT	01	0.1	18	18	18	✓	✓	25	✓	18	18	✓
NR	03	0.1	18	18	18	✓	✓	25	✓	18	18	✓
KN	04	0.1	18	18	18	D	✓	25	✓	18	18	✓
JF	05	0.1	18	18	18	D	✓	25	✓	18	18	D
RB1	06	0.1	18	18	18	D	✓	25	✓	18	18	D
AH	07	0.1	18	18	18 H	D	✓	25	✓	18	18	✓
SG	08	0.1	18	18	18	D	✓	25	✓	18	18	✓
AB2	09	0.1	18	18	18 H	D	✓	25 N, O	✓N	18 N	18 N	✓
SV	01	0.02	18	18	18	✓	✓	25 N	✓N	18 N	18 N	✓
CB	02	0.02	18	18	18	D	✓	25	✓C	18	18	✓
QY	03	0.02	18	18	18 L	✓	✓	25	✓	18	18	✓
DH	04	0.02	18	18	18 H	D	✓	25	✓	18	18	D
JS2	05	0.02	18	18	18 H	D	✓	25	✓	18	18	✓
SK	06	0.02	18	18	18	D	✓	18	✓	18	18	✓
DC	08	0.02	18	18	18	D	✓	25	✓C	18	18	✓
GB	09	0.02	18	18	18 H	D	✓	25 N	✓E, N	18 N	18 N	D

Main Study

Subject ID	Set/Group No.	Dose Level (mg/kg/day)	P1 Blood 14cc 9 am	P1 Blood 7cc Noon	P1 Blood 7cc 5 pm	P1/P2 Urine 50cc	P2 Blood 7cc 8 am	P2 Blood 7cc 5 pm	P2/P3 Urine 50cc 8 am	P3 Blood 7cc 8am	P3 Blood 7cc 5 pm	P3/P4 Urine 50cc 8 am
--		Log/NFS Schedule SD#:	SD20	SD20	SD20	SD20/21	SD21	SD21	SD21/22	SD22	SD22	SD22/23
AN	01	0.5	18	8		D	8		D	8		D
DR	02	0.5	18+	8		✓	8		✓	8	8	✓
JS1	03	0.5	18	8		D	8		✓	B	B	D
CW	04	0.5	18	8		✓	8	8	✓	8		✓
TO	05	0.5	18	8		D	8		✓	8		D
MA	06	0.5	18	8		✓	8		✓	8		✓
AB1	07	0.5	18	8		✓	8		✓	8	✓	D
RC	08	0.5	18	8	8	✓	8		✓	8		✓
RT	01	0.1	18	8		D	8		✓	8		✓
NR	03	0.1	18	12	12	D	8		✓	8		D
KN	04	0.1	18			✓	8	8	✓	8		D
JF	05	0.1	18	8		D	8		✓	8		✓
RB1	06	0.1	18	8		✓	8		✓	8	8	✓
AH	07	0.1	18	8	8	✓	8	8	✓	8	8	✓
SG	08	0.1	18	8	8	✓	8		D			
AB2	09	0.1	18	8	8	D	8		✓	8	8	✓
SV	01	0.02	8	8		✓	8		✓	8		
CB	02	0.02	18	8	8V		8		✓	8	8	✓
QY	03	0.02	18	8		✓	8		✓	8	8	6
DH	04	0.02	18	8		✓	8	8	D	8		✓
JS2	05	0.02	18+	8		✓	8		✓	8		✓
SK	06	0.02	18	8	8	✓	8		✓	8		✓
DC	08	0.02	18	8	8	✓	8	8	✓	8		
GB	09	0.02	18	8		✓	8	8	✓	8	8	✓

Main Study

Subject ID	Sex	Set/Group No.	Dose Level (mg/kg/day)	P4 Blood 7cc 8 am	P4/P5 Urine 50cc	P14/P15 Urine 50cc	P15 Blood 16cc 8 am	P15 RAI Dose Admin.	P15 BW	P15 UPT (F)	Comments
--	--	Log/NFS Schedule SD#:			SD23	SD23/24	SD33/34	SD34	SD34	SD34	--
AN	F	01	0.5	8	B	B	B	✓	✓	✓	
DR	M	02	0.5	8	✓	C	25	✓	✓	N/a	No Subject Log
JS1	M	03	0.5	8	D	D	B	✓	✓	N/a	
CW	F	04	0.5	8	D	✓	25	✓	✓	✓	
TO	M	05	0.5	8	D	D	B	✓	✓	N/a	
MA	M	06	0.5	8	✓	✓	25	✓	✓	N/a	
AB1	F	07	0.5	8	D	✓	25	✓	✓	✓	✓
RC	F	08	0.5	B	D	D	25	✓	✓	✓	
RT	F-h	01	0.1	8	D	✓	25	✓	✓	N/a	
NR	M	03	0.1	8	D	✓	25	✓	✓	N/a	
KN	M	04	0.1	8	D	D	25	✓	✓	N/a	
JF	F	05	0.1	8	D	D	B	✓	✓	✓	
RB1	M	06	0.1	8	D	✓	25	✓	✓	N/a	
AH	F	07	0.1	8	D	D	25	✓	✓	✓	✓
SG	F	08	0.1	8	D	D	25	✓	✓	✓	
AB2	M	09	0.1	8	D	D	25	✓H	✓	N/a	
SV	F-h	01	0.02	B	B	B	25	✓C	✓	N/a	
CB	F	02	0.02	8	B	✓	25	✓C	✓	✓A	
QY	M	03	0.02	8	B	✓	25	✓	✓	N/a, P	
DH	M	04	0.02	8	D	✓	25	✓	✓	N/a	
JS2	M	05	0.02	8	✓	D	25	✓	✓	N/a	
SK	F	06	0.02	8	D	✓	21	✓	✓	✓P	
DC	F	08	0.02	8	D	D	25	✓	✓B	✓R	
GB	M	09	0.02	8	D	D	25	✓	✓	N/a	

Uptake Only (Short) Study

Subject ID	Sex	Set/ Group No.	Dose Level (mg/kg/day)	Signed Consent Form	Phys. Ex. w/ Thyroid Palp, BW, Drug Screen	Pr Visit Preg. Test	Pr Visit Blood 17cc	Pr Visit Urine (vol)	Baseline Visit RAI Dose Admin. 9 am	Dose Calc.	E8 Blood 4cc Prior to Dose 8 am	E14 Blood 10cc 8 am	E14 RAI Dose Admin. 9 am	E14/P1 Urine 50cc	P15 UPT (F)	P15 RAI Dose Admin. 9 am	
--	--	Log/NFS Schedule		--	--	--	--	SD0/1	SD1	--	SD13	SD19	SD19	SD19/20	SD34	SD34	
BR	F	11	0.5	✓	BW					✓	✓					✓ K	
NA	M	12	0.5	✓	BW	N/a, Q	27			✓	✓	10	20	✓		N/a	✓
VM	F-h	11	0.1	✓	BW	N/a ✓	27			✓	✓	10	10	✓ I		N/a	✓ I
SD1	M	12	0.1	✓	BW	N/a	27	✓		✓	✓	10	13	✓		N/a	✓ C
Z GH	F-h	11	0.02	✓	BW	N/a				✓	✓	10	20	✓		N/a	✓
SD2	M	13	0.02	✓	BW	N/a	27			✓	✓	10	20	✓		N/a	✓
RB2	F	09	0.007	✓	BW	✓ α	27			✓	✓	10	20	✓ N			✓
MJ	F	10	0.007	✓	BW	✓ α	27			✓	✓			✓		N/G	✓
PE	M	10	0.007	✓	BW	N/a				✓ C	✓	10	10	✓		N/a	✓ M
SE	F	10	0.007	✓	BW	✓ α	27	✓		✓	✓	10	20	✓			✓
EA	F	12	0.007	✓	BW	✓ α	27			✓	✓	10	20	✓			✓ I
LB	F-h	13	0.007	✓	BW	N/a				✓	✓	10	20	✓		N/a	✓
LR	F	13	0.007	✓	BW	✓ α	27	✓		✓	✓	10	20	✓			✓

**Study of Perchlorate Pharmacokinetics and  
Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans  
CRC Protocol #628**

**Notes to Protocol Requirements and Study Documentation Review Table (Tab 1)**

Sex codes: M = male     F = female     F-h = female with hysterectomy

✓ = Protocol requirement fulfillment documented in Subject Log Forms and/or Nurse's Flow Sheet (NFS), as appropriate, or in Radiolabeled Iodine (RAI) Dose Administration Forms.

Shaded box = Documentation of data collection not found in the subjects' folders for the protocol requirement.

Pr = Preliminary screen

E = Exposure day

SD = Study day

P = Postexposure day

**General Comments**

- The number recorded in blood draw columns may indicate the cc size of the tube used by the nurse, which is the size required by the protocol. However, documentation of the actual volume drawn was not found in the data provided.
- The identification number for subject MA is recorded incorrectly on various subject data forms.
- The original consent forms for subjects MA and DH were lost. Consent forms were re-signed after study completion.
- The protocol specifically states that body weights should be recorded at the following intervals: preliminary visit, baseline visit (SD1), E2 (SD7) and E14 (SD19). However, a statement on page 14 of the protocol in the "Special nursing instructions" section states, "Ideally, body weight should be recorded on all Exposure Days on which blood is drawn (but not if this interferes with the volunteers' progress to the Nuclear Medicine facility on Exposure Days 2, 3, and 14)." Therefore, the missing body weights for some subjects on E2 and E14 may have been omitted due to scheduling conflicts; however, an explanation of the reason body weights were not measured could not be found in the raw data or the NFS made available to this auditor. There also is no indication that an attempt was made to record body weights on every exposure day on which blood was taken as noted in the "Special nursing instructions" section of the protocol. However, this may be the reason that body weights also were measured on E9 (SD14) for all subjects except CD. Note: communication from the study co-investigator during the audit process states, "the reason for measuring body weight was to be able to calculate the perchlorate dose correctly. In the absence of the gain or loss of more than a few pounds, ...this can be accomplished satisfactorily with just one measurement."

Specific Comments Documented on Table

N/a = Not applicable.

BW = Only the body weight data were present.

A = Documentation of sample collection located on NFS; however, analysis not located in the USAF.XLS spreadsheet. This comment only applies to the urine pregnancy test results.

B = Body weight measurements for Preliminary, Baseline (SD1), E2 (SD7) and P15 (SD34) were 79.8, 69.7, 79.8 and 80.0 kg, respectively. It appears that the Baseline visit body weight was recorded incorrectly. Please verify that this incorrect body weight was not used to calculate the perchlorate dose.

C = RAI Dose Administration Form present, but time of administration not recorded.  
[Time of administration was assumed to be the hand-recorded times written on the RAI sheets in the subjects' folders. In some instances the word "administered" was written with the hand-recorded time. A communication from the study co-investigator indicated that these times were not the official time of administration, but a guide for scheduling when the subject needed to return to the clinic for their nominal 8- and 24-hour uptake measurements. The co-investigator stated that the "best estimate of the RAI ingestion time is the counting instrument's internal record of when the two RAI capsule counts (with and without lead) were taken." Based on the specific time-requirements listed in the protocol for administration of the capsules, consistent documentation of capsule administration should have been made.]

D = Discrepancy. Data present either in Subject Log Forms or NFS, but not in both, as would be expected.

E = RAI dose administered at 5:55, 5:11 or 5:12; no documentation as to a.m. or p.m. Also, time is out of protocol specification. (See additional comments in Note C above.)

F = Documentation of blood draw for iodine or perchlorate measurement not found in raw data.

G = Documentation of blood draw for thyroid function not found in raw data.

H = Time of blood draw not documented on NFS.

I = RAI dose administered one day late. This is a protocol deviation. (Note: there is a discrepancy in the dates of perchlorate ingestion in the records in the subject's folder and the study co-investigator's combined database.)

K = Time of RAI dose administration not documented, but clearly occurred after 11 a.m. This is a protocol deviation. (According to a communication from the study co-investigator, the reason for the late RAI dosing was that "the subject was delayed in getting to the clinic".)

L = Time of blood draw out of protocol specification ( $\pm$  1 hour).

M = RAI dose administration one week late. This is a protocol deviation. (According to a communication from the study co-investigator, the reason for the delay was that "the subject had to be out of town for the week" of scheduled RAI dose administration.)

N = Extended dosing one day; therefore, RAI administration and blood collection was on E15.

O = Extended dosing one day; blood collection was on E14 and E15.

CRC Protocol #628

Notes to Protocol Requirements and Study Documentation Review Table (Tab 1)

Page 3 of 3

- P* = Subject identified as male; however, the NFS indicates that a pregnancy test was performed.
- Q* = Pregnancy test not required as subject identified as male or female with hysterectomy; however, the USAF.XLS Excel spreadsheet indicates pregnancy test was performed.
- R* = N/a recorded on NFS for P15 pregnancy test; test should have been performed.
- S* = Time not recorded on the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet.
- T* = Discrepancy between the time of sample collection documented in the USAF.XLS Excel spreadsheet and the time of sample collection documented in the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet.
- U* = Although documentation that the sample was collected could not be located in the two spreadsheets provided, documentation that the sample was analyzed for Total iodine can be found in the raw data (see Tabs 3 and 4).
- V* = Documentation that the sample was collected was not found in the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet, even though documentation that the sample was collected and analyzed for Total iodine can be found in the NFS and the raw data for serum iodine analysis (see Tab 3), respectively.
  
- $\alpha$  = Documentation or verification of sample collection located in the USAF.XLS Excel spreadsheet created on June 25, 2000.
- $\beta$  = Documentation or verification of sample collection located in the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet created on February 23, 2001.
- $+$  = Apparent additional blood draw of 1 cc for Dr. Greer; documentation appears to be removed by white-out from other subjects' NFSs.

**Tab 2**

**Study of Perchlorate Pharmacokinetics and Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans  
CRC Protocol #628**

**Thyroid Function (Serum) Data (Tab 2)**

**Main Study**

Protocol required parameters: ✓ = TT3, TT4, Free T4 and TSH;  
 \* = thyroid peroxidase antibody (Anti-TPO); and  
 • = thyroglobulin antibody (Anti-TG).

Subject ID	Set/ Group No.	Dose Level (mg/kg/day)	Protocol-Required Intervals																	
			Pr	Base	E1 Noon	E1 4 pm	E2 8 am	E2 Noon	E2 5 pm	E3 9 am	E4 8 am	E4 Noon	E8 8-11 am	E14 8 am	E14 Noon	E14 5 pm	P1 9 am	P15 8 am		
Protocol-required values:			✓*•	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*•		
AN	01	0.5	✓*A	✓P	✓P	✓P	✓P	✓	✓A	✓	✓	✓A	✓	✓	✓	✓	✓DG	✓	✓*•	
DR	02	0.5	✓*A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*•A		
JS1	03	0.5	✓*A	✓	✓	✓	✓	✓	✓A,D	✓	✓	✓	✓	✓	✓	✓	✓	✓*•Q		
CW	04	0.5	✓*A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓C	✓	✓	✓*•	
TO	05	0.5	✓*A,D,G	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓R	✓Q	✓	✓Q	✓*•	
MA	06	0.5	✓*A	✓A	✓A	✓C	✓	✓	✓A	✓	✓	✓	✓	✓Q	✓	✓	✓A	✓	✓*•	
AB1	07	0.5	✓*•A	✓	✓Q	✓	✓	✓	✓	✓*•										
RC	08	0.5	✓*•A	✓Q	✓	✓	✓	✓D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*•	
RT	01	0.1	✓*A	✓	✓D,P	✓P	✓P	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓DG	✓	✓*•
NR	03	0.1	✓*A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*•Q	
KN	04	0.1	✓*A	✓	✓	✓	✓	✓	✓A	✓	✓	✓	✓	✓	A,D,G	✓	✓	✓F	✓*•	
JF	05	0.1	✓*A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓A	✓Q	✓R	✓Q	✓Q	✓*•EF	
RB1	06	0.1	✓*•A,D	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓Q	✓	✓	✓	✓	✓*•	
AH	07	0.1	✓*•	✓	✓Q	✓	✓	✓	✓	✓	✓*•									
SG	08	0.1	✓*•A	✓Q	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓A	✓	✓	✓*•	
AB2	09	0.1	✓*•A,Q	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	I	✓	✓	✓	✓*•B	
SV	01	0.02	✓*A	✓P	✓P	✓P	✓P	✓	✓	✓	✓	✓	✓	✓	D,G,H	✓H	✓H	✓	✓*•	
CB	02	0.02	✓*	✓A,Q	✓	✓	✓	✓	✓A	✓	✓	✓	✓	✓	✓	✓	✓	✓A	✓*•	
QY	03	0.02	✓*A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓A	✓	✓	✓	✓	✓*•	
DH	04	0.02	✓*A	✓	✓	✓	✓D	✓	✓	✓	✓	✓	✓	✓	✓	L	✓	✓	✓*•	
JS2	05	0.02	✓*A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	R	✓R	✓R	✓Q	✓*•	
SK	06	0.02	✓*A	✓	✓S	✓C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*•	
DC	08	0.02	✓*•A	✓Q	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*•	
GB	09	0.02	✓*•A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓C	✓S	✓	I	✓	✓	✓*•	

Key: See "Notes to Thyroid Function (Serum) Data Table (Tab 2)" following two pages of tables.

CRC Protocol #628

Thyroid Function (Serum) Data (Tab 2)

Page 2 of 2

Uptake Only (Short) Study

Protocol required parameters: ✓ = TT3, TT4, Free T4 and TSH.

Subject ID	Set/ Group No.	Dose Level (mg/kg/day)	Protocol-Required Intervals	
			Pr 8 am	E14
Protocol-required values:			✓	✓
BR	11	0.5	✓	✓
NA	12	0.5	✓	✓
VM	11	0.1	✓	✓
SD1	12	0.1	✓	✓A
GH	11	0.02	✓A	✓
SD2	13	0.02	✓	✓
RB2	09	0.007	✓A	✓
MJ	10	0.007	✓A,M,N	✓
PE	10	0.007	✓D	✓
SE	10	0.007	✓A	✓
EA	12	0.007	✓A	✓
LB	13	0.007	✓D,G,O,P	✓
LR	13	0.007	✓	✓T

**Study of Perchlorate Pharmacokinetics and  
Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans  
CRC Protocol #628**

**Notes to Thyroid Function (Serum) Data Table (Tab 2)**

- ✓ = Thyroid hormones TT3, TT4, Free T4 and TSH were evaluated. Discrepancies for a particular interval (i.e. not all thyroid hormones were evaluated) are identified in the table by a letter code and the corresponding explanation is found below.
- \* = Antibodies to thyroid peroxidase (Anti-TPO) were evaluated. Discrepancies for a particular interval are identified in the table by a letter code and the corresponding explanation is found below.
- = Antibodies to thyroglobulin (Anti-TG) were evaluated. Discrepancies for a particular interval are identified in the table by a letter code and the corresponding explanation is found below.

Shaded box = Documentation of data collection not found for the protocol requirement.

Pr = Preliminary screen  
Base = Baseline  
E = Exposure day  
P = Postexposure day

- A = The time of sample collection documented in the raw data was not within the protocol-specified time ( $\pm 1$  hour).
- B = According to the date recorded in the USAF.XLS Excel spreadsheet, this sample was collected on P14, not P15.
- C = Two blood draws were performed and evaluated for this one interval. Which values were reported? Please explain in raw data. (In the USAF.XLS Excel spreadsheet, both analyses are listed. For GB and SK, the noon sample for the same day is missing, could one of these samples be mislabeled? Verification to determine these mislabeled samples prior to using these data in the PB/PK model would be appropriate. For CW, E14, Noon, TSH and Free T4 were analyzed twice for samples identified as 12:00 and 12:32. For MA, E1, 4 p.m., thyroid hormone analyses were performed for samples identified as 15:43 and 16:00.)
- D = TSH not analyzed [For subject RT, interval E1, 4 p.m., note to raw data states quantity not sufficient (QNS), which adequately explains why value is missing].
- E = TT3 not analyzed.
- F = TT4 not analyzed.
- G = Free T4 not analyzed.
- H = Dosing extended one day – Blood was drawn and analyzed for thyroid hormones on E15, not E14.
- I = Dosing extended one day – Blood was drawn and analyzed for thyroid hormones on E14 and E15.

- J = Date on USAF.XLS Excel spreadsheet is listed as 3-14-00 (E1), not 3-15-00 (E2). Need to verify that these samples were drawn and analyzed on the correct date, 3-15-00 for E2, prior to using these values for the PB/PK Model data.
- K = Analyses for TT3, TT4, Free T4 and TSH are listed in the USAF.XLS Excel spreadsheet as 3-16-00 (E3) at 16:45. No samples were required at this time interval for E3. There is no documentation that samples were drawn or analyzed on 3-15-00 (E2) at the 5 p.m. time interval; therefore, verification is needed that the samples identified as 3-16-00 (E3) at 16:45 are identified incorrectly and that samples were actually drawn and analyzed on 3-15-00 at 16:45 for E2 prior to using these values for the PB/PK Model data.
- L = The USAF.XLS Excel spreadsheet indicates that on 3-27-00 (E14) Free T4 and TSH were analyzed from samples identified with a time of 12:37. Also, on 3-27-00 (E14), one sample identified with a time of 12:07 had all four thyroid hormones analyzed (TT3, TT4, Free T4 and TSH). Verification is needed to determine which analyses are to be used for the "noon" sample on E14. Also, documentation is needed to determine if samples were mislabeled and values from one of these time points are in fact for the 8:00 a.m. collection time.
- M = Preliminary TSH value suggested that this individual was hypothyroid. According to protocol, page 11, "Volunteers will be excluded if thyroid function tests, CBC, serum chemistry profile, or urinalysis yield any abnormal results or evidence of drug use." A reason for using this individual should be documented in the raw data.
- N = Analyses for antibodies to thyroid peroxidase and thyroglobulin were performed on blood drawn one day prior to E1 although not required by the protocol.
- O = Preliminary data obtained three months prior to Baseline date. Is this appropriate?
- P = Analysis for thyroid peroxidase antibody was performed although not required by the protocol.
- Q = Note in raw data states that "Free T4 Test performed at: Quest Diagnostics 6600 SW Hampton St. Portland, OR 97223." Original raw data from Quest Diagnostics was not supplied to this auditor.
- R = The Free T4 values originally reported (in USAF.XLS Excel spreadsheet of 6-25-00) subsequently were withdrawn due to technical difficulties. Verification is needed that these values have been removed from the study results. As with other samples where technical difficulties were encountered, these samples should have been reanalyzed, but a reanalysis was never performed.
- S = According to the study co-investigator's database, the OHSU laboratory may have recorded the incorrect time or incorrect date in the USAF.XLS spreadsheet. This needs to be verified in the raw data and appropriately documented.
- T = Blood drawn and analyzed on P1 (5-31-00) at 8:00 instead of E14 (5-30-00).

**Tab 3**

**Study of Perchlorate Pharmacokinetics and Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans**  
**CRC Protocol #628**

**Serum Iodine Data (Tab 3)**

**Main Study**

37

Subject ID	Set/ Group No.	Dose Level (mg/kg/day)	Protocol-Required Intervals																				Comments	
			Pr	Base	E1 Noon	E1 4 pm	E2 8am	E2 Noon	E2 5 pm	E3 9 am	E4 8 am	E4 Noon	E14 E8	E14 Noon	E14 5 pm	P1 9 am	P1 Noon	P1 5 pm	P2 8 am	P2 5 pm	P3 8 am	P3 5 pm	P4 8 am	
AN	01	0.5	R	✓	✓	✓A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DR	02	0.5	✓	✓	✓A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓B	R	✓B
JS1	03	0.5	x	x	x	x	x	x	xB	x	x	x	x	x	R	x	x	x	x	x	x	x	x	D
CW	04	0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TO	05	0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MA	06	0.5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	xB	x	x	x
AB1	07	0.5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
RC	08	0.5	x	x	x	x	x	x	xA	x	x	x	x	x	x	x	x	x	x	x	x	x	xA	x
RT	01	0.1	R	✓	✓	✓A	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓B	✓	✓	✓	✓
NR	03	0.1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D
KN	04	0.1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	xA	x
JF	05	0.1	✓	✓	✓	✓	✓	✓	R	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RB1	06	0.1	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
AH	07	0.1	x	x	x	x	x	x	xA	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
SG	08	0.1	x	x	x	x	x	xA	x	x	x	x	x	x	x	x	x	x	x	x	x	xA	x	D
AB2	09	0.1	x	x	x	x	x	x	x	x	x	x	x	x	xE	x	x	x	x	x	x	x	xB	x
SV	01	0.02	R	✓	✓	✓A	✓	✓	✓B	✓	✓	✓	✓	✓F	✓	✓	✓	✓	✓	✓	✓	✓	✓	H
CB	02	0.02	x	x	x	x	R	x	xB	x	x	x	x	x	x	xB	x	x	x	x	x	x	x	✓
QY	03	0.02	x	x	R	x	x	x	xB	x	x	x	x	x	x	x	✓	x	x	x	x	x	x	D, I
DH	04	0.02	xJ	x	x	x	x	✓S	x	x	x	x	x	x	R	x	x	x	✓O	x	x	x	x	K, L
JS2	05	0.02	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	I, M, N
SK	06	0.02	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	D, K, O
DC	08	0.02	x	x	x	x	x	xA	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	✓A
GB	09	0.02	x	x	x	x	x	x	x	x	x	x	x	x	xE	x	x	x	x	x	x	x	xA	x

Key: See "Notes to Serum Iodine Data Table (Tab 3)" following one page of tables.

**Study of Perchlorate Pharmacokinetics and  
Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans  
CRC Protocol #628**

**Notes to Serum Iodine Data Table (Tab 3)**

- \* = Data obtained for protocol-required interval with two runs (analyses) for each sample.
- ✓ = Data obtained for protocol-required interval with only one run (analysis) for each sample.

Discrepancies for a particular interval are identified in the table by a letter code and the corresponding explanation is found below.

Shaded box = Documentation of data collection not found for the protocol requirement.

Pr = Preliminary screen

Base = Baseline

E = Exposure day

P = Postexposure day

- A = Sample time not identified on the raw data sheet; assumed it was for this interval.  
(Explanation from Laboratory: time was not recorded on the sample vial. However, except for the sample flagged for subject KN, all sample times were recorded in the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet.)
- B = The time of sample collection documented in the raw data was not within the protocol-specified time ( $\pm 1$  hour).
- C = Additional samples were run (3/25/00, 1700) that were not required by the protocol (Time period = P12).
- D = One of the subjects chosen as part of the 20% to perform detailed QA/QC of the data.  
See page 2 for additional comments on the data for this subject.
- E = Dosing extended one day; data collected and analyzed on E14 and E15. Reason for extended dosing explained in raw data; however, an explanation is needed to identify the analyses that were used in the development of the PB/PK model.
- F = Dosing extended one day; therefore, data collected and analyzed on E15 only.
- G = A set of repeats was run on 7/20/00, Set A (pg. 57), but no explanation on necessity of these repeats was included in the raw data. (Explanation from Laboratory: % difference was too large.)
- H = Run on 5/25/00, Set H (pg. 31): subject not identified; assumed run was for subject SV.
- I = Each sample was run three times for this subject; no explanation on why three analyses were performed or to identify the results that were used to develop the PB/PK model.  
(Explanation from Laboratory: additional analyses performed by Mike Previti, who was recently employed by the laboratory, to test the accuracy of his procedure and/or to gain confidence in the method. However, no explanation was given to explain how these analyses were reported, i.e. were results from all analyses used or just the first two results?)
- J = The first sample (preliminary) appears to have the incorrect date "3/2/99" recorded on the hand-recorded raw data and on the Iodine Calculations Excel spreadsheet. The correct date is 3/2/00. (Explanation from Laboratory: date of 3/2/99 was recorded on the sample vial. However, the correct date of 3/2/00 was recorded in the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet.) There also are two samples collected and analyzed for the preliminary evaluation interval on 3/2/00. Only one was required.

*K* = These results were analyzed using the Iodine Calculations Excel spreadsheet instead of manual tabulations.

*L* = Total I  $\mu\text{g}/\text{dL}$  should be reported to one, not two, decimal places on the Iodine Calculations Excel spreadsheet. (Explanation from Laboratory: there was a general inconsistency in the procedures followed; however, this did not affect the results.)

*M* = Run on 7/20/00, Set C (pg. 58), Tube #4 (Pr): the %T and  $\mu\text{g}/\text{dL}$  I results have question marks next to them. These values are low, but no explanation for the question marks was given. (Explanation from Laboratory: the question marks indicate that the  $\mu\text{g}$  I was significantly lower than previous runs – a possible pipetting error.)

*N* = Additional run for part of the samples found on 7/24/00, Set A (pg. 64). No explanation was provided with the reason these samples were rerun or to identify the results that were used in the development of the PB/PK model. (Explanation from Laboratory: these samples were rerun to test a preliminary version of the Iodine Calculations Excel spreadsheet that was in the midst of being developed to perform data calculations. However, it should be verified that those results were not used in the development of the PB/PK model.)

*O* = The Iodine Calculations Excel spreadsheet for 7/31/00, Set C has subjects identified as "DC & GC"; should be "DC & GB".

*P* = A set of samples was rerun on 7/31/00, Set C (pg. 69). No explanation was provided with the reason these samples were rerun or to identify the results that were used in the development of the PB/PK model. (Explanation from Laboratory: additional analyses performed by Mike Previti, who was recently employed by the laboratory, to test the accuracy of his procedure and/or to gain confidence in the method. However, no explanation was given to explain how these analyses were reported, i.e. were results from all analyses used or just the first two results.)

*Q* = The Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet indicates that a sample was collected on P2 (03/29/2000) at 8:15 a.m.; however, the hand-recorded raw data do not have this sample identified. There is a sample identified as "3/28/00 0815" in the raw data. There is possibly a misidentification of this sample in the raw data. This needs to be resolved.

*R* = Verification of sample collection located in the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet; however, results of analysis could not be located in the serum iodine raw data.

*S* = Laboratory's explanation of why this sample was analyzed only once: there was not enough sample available to run a second analysis.

#### **Additional comments on data for nine subjects selected for 100% qualitative data review**

##### **A. Subject JS1**

1. No additional comments.

##### **B. Subject MA**

1. For 6/13/00, Set D (pg. 40), Tube #5 (E1, 4 p.m.) if the %T value is 33.5, the  $\mu\text{g}$  I is 0.003, not 0.004, which changes the Total I  $\mu\text{g}/\text{dL}$  to 3.0.
2. Difficult to read the results for run 6/15/00, Set D (pg. 42), Tube #9 (P2, 5 p.m.). (Note that the data being reviewed were photocopies of the original raw data. The original raw data may be more legible.)

**C. Subject NR**

1. The  $\mu\text{g}$  I for the SL and SH control samples run on 7/18/00, Set B (pg. 52), are 0.007 and 0.029, respectively, which will result in Total I  $\mu\text{g}/\text{dL}$  of 3.5 and 14.5, respectively. (Explanation from Laboratory: the manual calculations versus electronic calculations may vary slightly, but not significantly, due to manual integration of curve drawn visually versus computer calculations. The result of 4.0 vs. 3.7 and 15.5 vs. 14.5 are not significantly different and do not affect the results.)
2. A set of repeats was run on 7/20/00, Set A (pg. 57), but no explanation was provided with the reason these repeats were necessary or to identify the results that were used in the development of the PB/PK model. (Explanation from Laboratory: the first two runs of these samples had results with a % difference too large.)

**D. Subject SG**

1. One sample from E2 and one sample from P3 did not have the time identified; assumed they were the Noon and 5 p.m. samples, respectively. (Explanation from Laboratory: time was not recorded on the sample vial. However, all sample times were recorded in the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet.)
2. The  $\mu\text{g}$  I for the UC7 sample run on 7/12/00, Set F (pg. 49), is 0.045, not 0.05, which changes the Total I  $\mu\text{g}/\text{dL}$  to 45.0.

**E. Subject QY**

1. Some minor discrepancies were found between the procedures used by Mr. Pino and those used by Mr. Previti. Mr. Pino, who performed most of the manual calculations, did not record  $\mu\text{g}$  I to four decimal places. Instead, he always determined the value to the nearest thousandths of a  $\mu\text{g}$ . However, as the following examples demonstrate, Mr. Previti did record the  $\mu\text{g}$  I to four decimal places. A consistent procedure should have been used. (Explanation from Laboratory: there was a general inconsistency in the procedures followed; however, this did not affect the final results.)
  - 7/19/00, Set E (pg. 54), Tube #9 (P1, 8 a.m.): the  $\mu\text{g}$  I was recorded as 0.0165.
  - 7/20/00, Set E (pg. 58), Tubes #4 and #11 (Base and E4, 8 a.m.): the  $\mu\text{g}$  I was recorded as 0.0255 and 0.0245, respectively.
  - 7/20/00, Set F (pg. 59), Tube #3 (E14, 5 p.m.): the  $\mu\text{g}$  I was recorded as 0.0255.
2. Each sample was run three times for this subject. No explanation was provided with the reason these samples were rerun or to identify the results that were used in the development of the PB/PK model. (Explanation from Laboratory: additional analyses performed by Mike Previti, who was recently employed by the laboratory, to test the accuracy of his procedure and/or to gain confidence in the method. However, no explanation was given to explain how these analyses were reported, i.e. were results from all analyses used in the development of the PB/PK model or just the first two results?)

3. On 7/24/00 an additional run for some of the samples was performed and analyzed using the Iodine Calculations Excel spreadsheet. No explanation was provided with the reason these samples were rerun or to identify the results that were used in the development of the PB/PK model. (Explanation from Laboratory: these samples were rerun to test a preliminary version of the Iodine Calculations Excel spreadsheet that was in the midst of being developed to perform data calculations. Those calculations were not used in the development of the PB/PK model.)
4. Set B, Tubes #3 and #8 (P and E4, 8 a.m.) have an incorrect sample amount of 0.025 ml entered on the Iodine Calculations Excel spreadsheet. According to the hand-recorded raw data (pg. 64), the correct amount is 0.2 ml (200 µg). This will change the Total µg/dL I values from 76.15 and 46.20 to 9.5 and 5.78, respectively. (Explanation from Laboratory: the sample amounts were entered incorrectly into the trial Iodine Calculations Excel spreadsheet; however, those calculations were not used in the development of the PB/PK model.)

**F. Subject DC**

1. Two samples, 4/12/00 (E2) and 4/27/00 (P3), did not have a time listed; assumed they were the Noon and 5 p.m. samples, respectively. (Explanation from Laboratory: the time was not recorded on the sample vial. However, sample times were recorded in the Iodine & Perchlorate Sample Records CRC Protocol #628 2001-02-23.xls Excel spreadsheet.)
2. 7/24/00, Set D (pg. 62): discrepancy between hand-recorded raw data and Iodine Calculations Excel spreadsheet entry:
  - Sample amount for Tube #9 (P2, 5 p.m.) listed as 100 µl (0.1 ml) on hand-recorded raw data, but the Iodine Calculations Excel spreadsheet has amount listed as 0.2 ml. Please correct this discrepancy.
  - Sample amount for Tube #11 (P3, 5 p.m.) listed as 200 µl (0.2 ml) on hand-recorded raw data, but the Iodine Calculations Excel spreadsheet has amount listed as 0.1 ml. Please correct this discrepancy.

(Explanation from Laboratory: correct sample amounts for Tubes #9 and #11 were 0.2 and 0.1 ml, respectively; therefore, the Iodine Calculations Excel spreadsheet entry is correct. The results of the analysis are generated from the Iodine Calculations Excel spreadsheet; therefore, this discrepancy does not affect the final results.)

**Tab 4**

**Study of Perchlorate Pharmacokinetics and Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans**  
**CRC Protocol #628**

**Urinary Iodine Data (Tab 4)**

**Main Study**

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Subject ID	Set/ Group No.	Dose Level (mg/kg/day)	Protocol-Required Intervals										Comments
			Baseline	E1/ E2	E2/ E3	E8/ E9	E14/ P1	P1/ P2	P2/ P3	P3/ P4*	P4/ P5*	P14/ P15	
AN	01	0.5	x (7)	x (6)	x (6)	x (7)	x (24 hr)	x (6)	x (24 hr)			x (24 hr)	A, B, G
DR	02	0.5	x (4)	x (5)	x (3)	x (4)	x (24 hr)	x (4)				x (24 hr)	B, C, H, I
JS1	03	0.5	x (5)	x (3)	x (4)	x (4)	x (24 hr)	x (4)	x (24 hr)			x (24 hr)	F
CW	04	0.5	x (5)	x (6)	x (7)	x (4)	x (24 hr)	x (7)	x (24 hr)			x (24 hr)	
TO	05	0.5	x (5)	x (4)	x (5)	x (5)	x (24 hr)	x (4)	x (24 hr)			x (24 hr)	
MA	06	0.5	x (5)	x (5)	x (5)	x (5)	x (24 hr)	x (5)	x (24 hr)			x (24 hr)	F
ABI	07	0.5	x (5)	x (5)	x (5)	x (5)	x (24 hr)	x (5)	x (24 hr)			x (24 hr)	J, K, L, M, N
RC	08	0.5	x (4)	x (5)	x (5)	x (5)	x (24 hr)	x (5)	x (24 hr)			x (24 hr)	O, P
RT	01	0.1	x (11)	x (11)	x (10)	x (8)	x (24 hr)	x (9)	x (24 hr)			x (24 hr)	B, Q
NR	03	0.1	x (4)	x (5)	x (5)	x (5)	x (24 hr)	x (5)	x (24 hr)			x (24 hr)	F
KN	04	0.1	x (6)	x (8)	x (8)	x (6)	x (24 hr)	x (7)	x (24 hr)			x (24 hr)	
JF	05	0.1	x (4)	x (5)	x (4)	x (5)	x (24 hr)	x (5)	x (24 hr)			x (24 hr)	
RB1	06	0.1	x (4)	x (5)	x (5)	x (5)	x (24 hr)	x (5)	x (24 hr)			x (24 hr)	R, S
AH	07	0.1	x (5)	x (5)	x (5)	x (5)	x (24 hr)	x (5)	x (24 hr)			x (24 hr)	O, T
SG	08	0.1	x (5)	x (5)	x (5)	x (5)	x (24 hr)	x (5)	x (24 hr)			x (24 hr)	F
AB2	09	0.1	x (4)	x (4)	x (4)	x (4)	x (24 hr) E	x (5)	x (24 hr)			x (24 hr)	O, U
SV	01	0.02	✓(5)	✓(7)	✓(9)	✓(7)	✓(24 hr) E	✓(5)	✓(24 hr)			x (24 hr)	B, V, W
CB	02	0.02	x (12)	x (9) D	x (13) D	x (10) D	x (24 hr)	x (6)	x (24 hr)			x (24 hr)	B, X, Y
QY	03	0.02	x (8) D	x (9) D	✓(8) D	x (8)	x (24 hr)	x (7)	x (24 hr)			x (24 hr)	F
DH	04	0.02	x (9)	x (9)	x (8)	x (11)	x (24 hr)	x (9)	x (24 hr)			x (24 hr)	AA
JS2	05	0.02	x (6)	x (5)	x (5)	x (5)	x (24 hr)	x (5)	x (24 hr)			x (24 hr)	BB
SK	06	0.02	x (5)	x (5)	x (5)	x (5)	x (24 hr)	x (5)	x (24 hr)			x (24 hr)	CC
DC	08	0.02	x (5)	x (5)	x (4)	x (5)	x (24 hr)	x (4)	x (24 hr)			x (24 hr)	F
GB	09	0.02	x (5)	x (4)	x (5)	x (5)	x (24 hr) E	x (4)	✓(24 hr)			✓(24 hr)	O, DD, EE

Key: See "Notes to Urinary Iodine Data Table (Tab 4)" following two pages of tables.

Uptake Only (Short) Study

Subject ID	Set/ Group No.	Dose Level (mg/kg/day)	Protocol-required Intervals		Comments
			Baseline	E14/ P1	
BR	11	0.5	x	x	
NA	12	0.5	x	x	
VM	11	0.1	x	x FF	F
SD1	12	0.1	x	x	
GH	11	0.02	x	x	
SD2	13	0.02	x	x	
RB2	09	0.007	x	x GG	F
MJ	10	0.007	x	x	
PE	10	0.007	x	x	
SE	10	0.007	x	x	
EA	12	0.007	x	x	F
LB	13	0.007	x	x	
LR	13	0.007	x	x	

**Study of Perchlorate Pharmacokinetics and  
Inhibition of Radioactive Iodine Uptake (RAIU) by the Thyroid in Humans  
CRC Protocol #628**

**Notes to Urinary Iodine Data Table (Tab 4)**

- \* = Data obtained for protocol-required interval with two runs (analyses) for each sample. Discrepancies for a particular interval are identified in the table by a letter code and the corresponding explanation is found below.
- ✓ = Data obtained for protocol-required interval with only one run (analysis) for each sample. Discrepancies for a particular interval are identified in the table by a letter code and the corresponding explanation is found below.
- (#) = The number in parentheses indicates the total number of samples analyzed for that interval.
- (24 hr) = Only one sample, identified as "24 hr", was analyzed. Assumed that the individual samples collected were pooled into one large sample as required by communications between Dr. Gay Goodman and Dr. Dave Mattie.
- \* = The 24-hour urines collected on P3 to P4 and P4 to P5 were not analyzed based on a memo dated March 29, 2000 from Dr. Gay Goodman to Dr. Dave Mattie.

Shaded box = Documentation of data collection not found for the protocol requirement.

- E = Exposure day  
P = Postexposure day

There is a set of data on page 23 of the hand-recorded raw data that was analyzed on 5/16/00 but the sample identification numbers do not appear to be samples for this study.

- A = Subject Log Form for 24-hour urine collection not completed.  
B = Data calculated manually.  
C = Missing Subject Log Form for 24-hour urine collection information.  
D = Discrepancy between identification of urines analyzed and urines recorded on Subject Log Form for 24-hour urine collection.  
E = Extended dosing so E14/P1 interval was actually collected on E15/P1, and, consequently, remaining dates were shifted one day. In some instances a sample was collected but not analyzed and in other instances a sample was analyzed but no documentation was found that the sample was ever collected.  
F = One of the subjects chosen as part of the 20% to perform detailed QA/QC of the data. See page 4 for additional comments on the data for this subject.

*G* = According to the raw data, repeat analyses were necessary; however, repeat analyses for the following samples could not be located:

E1 – “2/22/00 2305” (from run 5/18/00, Set G, pg. 26);

E8 – “2/29/00 1610” (from run 5/18/00, Set E, pg. 26);

P1 – “3/7/00 700PM” (from run 5/18/00, Set G, pg. 26);

P1 – “3/7/00 920PM” (from run 5/18/00, Set H, pg. 27);

P1 – “3/7/00 1130PM” (from run 5/18/00, Set H, pg. 27).

(Explanation from Laboratory: these were flagged for additional review by Mr. Pino to determine if reruns were necessary; however, without further documentation in the raw data to indicate that the results were reviewed and reruns were deemed unnecessary, it appears that the evaluation of these samples is incomplete.)

*H* = The baseline sample 2/24/00, 0039, has an incorrect sample ID of “02/23/00, 0039” recorded in the notebook on 5/2/00, Set D, Tube #13, pg. 18.

*I* = According to the raw data, repeat analyses were necessary; however, repeat analyses for the following samples could not be located:

E8 – “3/7/00 1130PM” (from run 5/2/00, Set E, pg. 17);

E8 – “3/8/00 8AM” (from run 5/2/00, Set E, pg. 17).

(Explanation from Laboratory: these were flagged for additional review by Mr. Pino to determine if reruns were necessary; however, without further documentation in the raw data to indicate that the results were reviewed and reruns were deemed unnecessary, it appears that the evaluation of these samples is incomplete.)

*J* = The Iodine Calculations Excel spreadsheet (created by the laboratory for data calculations) and the hand-recorded raw data incorrectly identify subject AB, rather than AB1. (General comment: inconsistent documentation; however, it does not affect the final results.)

*K* = Repeat runs were performed in duplicate. The summary Results table was not available; therefore, not able to verify the values that were included in the summary.

*L* = The following note was included on the hand-recorded raw data for 8/30/00, Set E: “lost too ↑.” An explanation of the meaning or consequences resulting from this comment was not found in the raw data. (Explanation from Laboratory: all samples in this set may be inaccurate because there were %T values within the set that may have been high enough to contaminate the system. However, a rerun of these samples could not be located in the raw data.)

*M* = Sample “3/30/00 10-8A” was rerun on 8/31/00, Set A. No explanation was given for the reason this rerun was necessary. (Explanation from Laboratory: this rerun was necessary because the run on 8/29/00, Set E, pg. 105, Tube #6 had %T high enough to potentially affect Tube #7 and on 8/30/00, Set E, pg. 105, may have been entirely lost, see Note *L* above.)

*N* = Sample “4/18/00 8-BP” was flagged as “%T too low” on the Iodine Calculations Excel spreadsheet but not on the hand-recorded raw data sheet (run 8/29/00, Set F, pg. 106). (General comment: inconsistent documentation; however, it does not affect the final results.)

*O* = Inconsistencies of when samples were rerun. (Explanation from Laboratory: samples were rerun that had questionable %T values and/or questionable % differences in the results.)

**Attachment 5**

**Serum and Urine Iodine Results from Greer's Study**

**Sam Pino**

Dose	Set/G rp.	Subject	Sampling Date	Sampling Time-P&P	Sampling Time-Corr.	Serum I (mcg/dl)	Source of Time Correction		Notes
0.5	1	AN	02/17/00	0845	0845	6.5			
0.5	1	AN	02/22/00	1210	1210	6.0			
0.5	1	AN	02/22/00	?	1545	5.5	AI, AP, LT		
0.5	1	AN	02/23/00	0820	0820	6.0			
0.5	1	AN	02/23/00	1200	1200	6.5			
0.5	1	AN	02/23/00	1715	1715	5.5			
0.5	1	AN	02/24/00	0900	0900	6.0			
0.5	1	AN	02/25/00	0816	0816	6.0			
0.5	1	AN	02/25/00	1220	1220	6.5			
0.5	1	AN	02/29/00	?	1125	6.5	LT		
0.5	1	AN	03/06/00	0815	0815	6.0			
0.5	1	AN	03/06/00	1145	1145	6.5			
0.5	1	AN	03/06/00	1600	1600	5.5			
0.5	1	AN	03/07/00	0915	0915	6.0			
0.5	1	AN	03/07/00	1200	1200	6.5			
0.5	1	AN	03/07/00	1650	1650		QNS		
0.5	1	AN	03/08/00	0830	0830	6.5			
0.5	1	AN	03/08/00	1700	1700	5.5			
0.5	1	AN	03/09/00	0825	0825	5.0			
0.5	1	AN	03/09/00	1700	1700	6.5			
0.5	1	AN	03/10/00	0815	0815	6.0			
0.5	1	AN	03/21/00	0835	0835	5.0			
0.5	2	DR	02/22/00	1040	1040	5.0			
0.5	2	DR	02/24/00	0830	0830	5.5			
0.5	2	DR	02/29/00	?	1200	5.5	AI, AP, LT		Sampling time 1200 or 1600
0.5	2	DR	03/01/00	0845	0845	5.5			
0.5	2	DR	03/01/00	1220	1220	5.5			
0.5	2	DR	03/01/00	1600	1600	5.0			
0.5	2	DR	03/01/00	1650	1650	5.0			
0.5	2	DR	03/02/00	0910	0910	7.0			
0.5	2	DR	03/03/00	0815	0815	6.5			
0.5	2	DR	03/03/00	1213	1213	5.5			
0.5	2	DR	03/07/00	0910	0910	6.5			
0.5	2	DR	03/13/00	0900	0900	7.0			
0.5	2	DR	03/13/00	1205	1205	6.5			
0.5	2	DR	03/13/00	1700	1700	6.5			
0.5	2	DR	03/14/00	0840	0840	7.5			
0.5	2	DR	03/14/00	1200	1200	6.0			
0.5	2	DR	03/14/00	1650	1650	6.5			
0.5	2	DR	03/15/00	0850	0850	6.0			
0.5	2	DR	03/16/00	0915	0915	5.0			
0.5	2	DR	03/17/00	0905	0905		QNS		
0.5	2	DR	03/25/00	1700	1700	5.0			
0.5	2	DR	03/25/00	1700	1700	6.0			
0.5	2	DR	03/28/00	0905	0905	5.5			
0.5	3	JS1	02/24/00	?	1500	5.0	LT, LB, LC		
0.5	3	JS1	03/02/00	0815	0815	4.2			
0.5	3	JS1	03/07/00	1200	1200	4.6			
0.5	3	JS1	03/07/00	1600	1600	4.5			
0.5	3	JS1	03/08/00	0800	0800	4.2			

## Att. 5 - Pino Serum Iodine Results 2001-04-26.xls

Dose	Set/G rp.	Subject	Sampling Date	Sampling Time-P&P	Sampling Time-Corr.	Serum I (mcg/dl)	Source of Time Correction		Notes
0.5	3	JS1	03/08/00	1155	1155	4.2			
0.5	3	JS1	03/08/00	1600	1600	4.3			
0.5	3	JS1	03/09/00	0900	0900	5.0			
0.5	3	JS1	03/10/00	0800	0800	4.5			
0.5	3	JS1	03/10/00	1155	1155	4.5			
0.5	3	JS1	03/14/00	0920	0920	5.0			
0.5	3	JS1	03/20/00	1155	1155	3.0			
0.5	3	JS1	03/20/00	0820	0820	5.2			
0.5	3	JS1	03/20/00	1655	1655	5.0			
0.5	3	JS1	03/21/00	0900	0900	4.8			
0.5	3	JS1	03/21/00	1150	1150	5.2			
0.5	3	JS1	03/21/00	1650	1650	5.5			
0.5	3	JS1	03/22/00	1700	1700	4.3			
0.5	3	JS1	03/22/00	0800	0800	4.8			
0.5	3	JS1	03/23/00	0815	0815	4.0			
0.5	3	JS1	03/23/00	1700	1700	5.2			
0.5	3	JS1	03/24/00	0809	0809	5.0			
0.5	3	JS1	04/04/00	0810	0810	4.8			
0.5	4	CW	03/02/00	1215	1215	5.5			
0.5	4	CW	03/09/00	0805	0805	4.5			
0.5	4	CW	03/14/00	1210	1210	5.0			
0.5	4	CW	03/14/00	1605	1605	6.5			
0.5	4	CW	03/15/00	0810	0810	4.5			
0.5	4	CW	03/15/00	1055	1055	4.5			
0.5	4	CW	03/15/00	1223	1223	5.0			
0.5	4	CW	03/16/00	0900	0900	6.0			
0.5	4	CW	03/17/00	0800	0800	5.0			
0.5	4	CW	03/17/00	1205	1205	5.5			
0.5	4	CW	03/21/00	0920	0920	5.0			
0.5	4	CW	03/27/00	0800	0800	5.5			
0.5	4	CW	03/27/00	1200	1200	5.0			
0.5	4	CW	03/27/00	1700	1700	4.0			
0.5	4	CW	03/28/00	0855	0855	4.5			
0.5	4	CW	03/28/00	1225	1225	5.0			
0.5	4	CW	03/28/00	1700	1700	5.0			
0.5	4	CW	03/29/00	0800	0800	5.0			
0.5	4	CW	03/29/00	1650	1650	4.5			
0.5	4	CW	03/30/00	0807	0807	5.0			
0.5	4	CW	03/30/00	1700	1700	5.5			
0.5	4	CW	03/31/00	0805	0805	5.0			
0.5	4	CW	04/11/00	0800	0800	4.5			
0.5	5	TO	02/28/00	?	1345	3.5	LT, LB, LC		
0.5	5	TO	03/16/00	0807	0807	4.0			
0.5	5	TO	03/21/00	1202	1202	4.5			
0.5	5	TO	03/21/00	1555	1555	4.0			
0.5	5	TO	03/22/00	0825	0825	4.0			
0.5	5	TO	03/22/00	1206	1206	4.0			
0.5	5	TO	03/22/00	1700	1700	3.0			
0.5	5	TO	03/23/00	0915	0915	4.5			
0.5	5	TO	03/24/00	0810	0810	3.5			
0.5	5	TO	03/24/00	1200	1200	3.5			
0.5	5	TO	03/28/00	0950	0950	3.5			

Dose	Set/G rp.	Subject	Sampling Date	Sampling Time-P&P	Sampling Time-Corr.	Serum I (mcg/dl)	Source of Time Correction		Notes
0.5	5	TO	04/03/00	0815	0815	4.0			
0.5	5	TO	04/03/00	1205	1205	3.0			
0.5	5	TO	04/03/00	1655	1655	4.0			
0.5	5	TO	04/04/00	0910	0910	4.0			
0.5	5	TO	04/04/00	1155	1155	4.5			
0.5	5	TO	04/04/00	1650	1650	4.0			
0.5	5	TO	04/05/00	0800	0800	3.5			
0.5	5	TO	04/05/00	1650	1650	3.5			
0.5	5	TO	04/06/00	0800	0800	3.5			
0.5	5	TO	04/06/00	1655	1655	3.5			
0.5	5	TO	04/07/00	0805	0805	3.5			
0.5	5	TO	04/18/00	0810	0810	4.0			
0.5	6	MA	02/18/00	1015	1015	6.2			
0.5	6	MA	03/23/00	0908	0908	5.0			
0.5	6	MA	03/28/00	1660	1660	4.0			
0.5	6	MA	03/28/00	1205	1205	5.0			
0.5	6	MA	03/29/00	1825	1825	6.5			
0.5	6	MA	03/29/00	0800	0800	5.2			
0.5	6	MA	03/29/00	1200	1200	5.0			
0.5	6	MA	03/30/00	0940	0940	5.8			
0.5	6	MA	03/31/00	1145	1145	5.2			
0.5	6	MA	03/31/00	0750	0750	5.5			
0.5	6	MA	04/04/00	1055	1055	4.5			
0.5	6	MA	04/10/00	1145	1145	3.5			
0.5	6	MA	04/10/00	1805	1805	7.0			
0.5	6	MA	04/10/00	0800	0800	5.8			
0.5	6	MA	04/11/00	0935	0935	5.2			
0.5	6	MA	04/11/00	1730	1730	5.2			
0.5	6	MA	04/11/00	1240	1240	5.0			
0.5	6	MA	04/12/00	0910	0910	4.5			
0.5	6	MA	04/12/00	1725	1725	6.0			
0.5	6	MA	04/13/00	1645	1645	4.5			
0.5	6	MA	04/13/00	0835	0835	4.5			
0.5	6	MA	04/14/00	0810	0810	4.2			
0.5	6	MA	04/25/00	0815	0815	5.5			
0.5	7	AB1	03/17/00	1335	1335	6.8			
0.5	7	AB1	03/30/00	0805	0805	7.2			
0.5	7	AB1	04/04/00	1200	1200	7.8			
0.5	7	AB1	04/04/00	1600	1600	7.0			
0.5	7	AB1	04/05/00	0820	0820	6.5			
0.5	7	AB1	04/05/00	1210	1210	6.5			
0.5	7	AB1	04/05/00	1700	1700	5.8			
0.5	7	AB1	04/06/00	0840	0840	7.2			
0.5	7	AB1	04/07/00	0815	0815	6.2			
0.5	7	AB1	04/07/00	1145	1145	4.2			
0.5	7	AB1	04/11/00	0815	0815	6.0			
0.5	7	AB1	04/17/00	0800	0800	4.8			
0.5	7	AB1	04/17/00	1200	1200	7.0			
0.5	7	AB1	04/17/00	1650	1650	7.0			
0.5	7	AB1	04/18/00	0900	0900	7.0			
0.5	7	AB1	04/18/00	1200	1200	7.8			
0.5	7	AB1	04/18/00	1650	1650	7.5			

## Att. 5 - Pino Serum Iodine Results 2001-04-26.xls

Dose	Set/G rp.	Subject	Sampling Date	Sampling Time-P&P	Sampling Time-Corr.	Serum I (mcg/dl)	Source of Time Correction		Notes
0.5	7	AB1	04/19/00	0800	0800	7.0			
0.5	7	AB1	04/19/00	1650	1650	7.8			
0.5	7	AB1	04/20/00	0812	0812	7.2			
0.5	7	AB1	04/20/00	1700	1700	7.0			
0.5	7	AB1	04/21/00	0800	0800	6.8			
0.5	7	AB1	05/02/00	0800	0800	6.5			
0.5	8	RC	03/31/00	1215	1215	4.8			
0.5	8	RC	04/06/00	0800	0800	4.5			
0.5	8	RC	04/11/00	1600	1600	5.0			
0.5	8	RC	04/11/00	1200	1200	5.2			
0.5	8	RC	04/12/00	0750	0750	4.8			
0.5	8	RC	04/12/00	?	1205	5.5	AI, AP, LT		
0.5	8	RC	04/12/00	1720	1720	5.5			
0.5	8	RC	04/13/00	0920	0920	5.8			
0.5	8	RC	04/14/00	0800	0800	5.2			
0.5	8	RC	04/14/00	1205	1205	5.2			
0.5	8	RC	04/18/00	1040	1040	6.5			
0.5	8	RC	04/24/00	1200	1200	4.5			
0.5	8	RC	04/24/00	1645	1645	7.0			
0.5	8	RC	04/25/00	1218	1218	5.8			
0.5	8	RC	04/25/00	0805	0805	6.5			
0.5	8	RC	04/25/00	1648	1648	6.5			
0.5	8	RC	04/26/00	0750	0750	6.0			
0.5	8	RC	04/26/00	1635	1635	6.2			
0.5	8	RC	04/27/00	0800	0800	5.8			
0.5	8	RC	04/27/00	?	1640	6.0	AI, AP		
0.5	8	RC	04/28/00	0805	0805	6.5			
0.5	8	RC	04/29/00	0755	0755	6.2			
0.5	8	RC	05/09/00	0800	0800	6.5			
0.1	1	RT	02/17/00	0915	0815	6.0	AP, LT		
0.1	1	RT	02/22/00	1150	1150	4.5			
0.1	1	RT	02/22/00	?	1545	4.5	AI, AP		
0.1	1	RT	02/23/00	0810	0810	5.5			
0.1	1	RT	02/23/00	1155	1155	3.5			
0.1	1	RT	02/23/00	1605	1605	4.0			
0.1	1	RT	02/24/00	0800	0800	4.0			
0.1	1	RT	02/25/00	0755	0755	3.5			
0.1	1	RT	02/25/00	1205	1205	5.0			
0.1	1	RT	02/29/00	?	0930	5.5	AI, AP, LT		
0.1	1	RT	03/06/00	0800	0800				
0.1	1	RT	03/06/00	1145	1145	4.0			
0.1	1	RT	03/06/00	1600	1600	4.5			
0.1	1	RT	03/07/00	0905	0905	5.0			
0.1	1	RT	03/07/00	1200	1200	4.0			
0.1	1	RT	03/07/00	1700	1700	3.5			
0.1	1	RT	03/08/00	0915	0915	5.0			
0.1	1	RT	03/08/00	1700	1700	3.5			
0.1	1	RT	03/09/00	0810	0810	5.5			
0.1	1	RT	03/09/00	1710	1710	4.5			
0.1	1	RT	03/10/00	0800	0800	4.5			
0.1	1	RT	03/21/00	0820	0820	4.5			
0.1	3	NR	02/28/00	1050	1050	5.8			

## Att. 5 - Pino Serum Iodine Results 2001-04-26.xls

Dose	Set/G rp.	Subject	Sampling Date	Sampling Time-P&P	Sampling Time-Corr.	Serum I (mcg/dl)	Source of Time Correction		Notes
0.1	3	NR	03/02/00	0800	0800	5.0			
0.1	3	NR	03/07/00	1210	1210	4.2			
0.1	3	NR	03/07/00	1600	1600	4.5			
0.1	3	NR	03/08/00	0805	0805	4.0			
0.1	3	NR	03/08/00	1150	1150	4.0			
0.1	3	NR	03/08/00	1600	1600	4.0			
0.1	3	NR	03/09/00	0855	0855	4.5			
0.1	3	NR	03/10/00	0759	0759	4.5			
0.1	3	NR	03/10/00	1150	1150	4.0			
0.1	3	NR	03/14/00	1050	1050	4.0			
0.1	3	NR	03/20/00	0800	0800	4.5			
0.1	3	NR	03/20/00	1145	1145	6.8			
0.1	3	NR	03/20/00	1650	1650	5.8			
0.1	3	NR	03/21/00	0905	0905	5.0			
0.1	3	NR	03/21/00	1145	1145	5.5			
0.1	3	NR	03/21/00	1655	1655	4.5			
0.1	3	NR	03/22/00	0800	0800	5.0			
0.1	3	NR	03/22/00	1700	1700	4.8			
0.1	3	NR	03/23/00	0800	0800	4.8			
0.1	3	NR	03/23/00	1655	1655	5.5			
0.1	3	NR	03/24/00	0750	0750	6.2			
0.1	3	NR	04/14/00	0805	0805	5.5			
0.1	4	KN	03/02/00	1300	1300	7.0			
0.1	4	KN	03/09/00	0820	0820	6.0			
0.1	4	KN	03/14/00	1143	1143	6.2			
0.1	4	KN	03/14/00	1545	1545	5.2			
0.1	4	KN	03/15/00	0800	0800	6.5			
0.1	4	KN	03/15/00	1645	1645	6.2			
0.1	4	KN	03/15/00	1145	1145	5.8			
0.1	4	KN	03/16/00	0825	0825	7.2			
0.1	4	KN	03/17/00	0745	0745	6.5			
0.1	4	KN	03/17/00	1145	1145	5.8			
0.1	4	KN	03/21/00	0825	0825	6.5			
0.1	4	KN	03/27/00	1125	1125	4.2			
0.1	4	KN	03/27/00	0810	0810	6.8			
0.1	4	KN	03/27/00	1630	1630	5.5			
0.1	4	KN	03/28/00	1635	1635	5.0			
0.1	4	KN	03/28/00	0835	0835	5.5			
0.1	4	KN	03/28/00	1145	1145	5.2			
0.1	4	KN	03/29/00	1630	1630	5.2			
0.1	4	KN	03/29/00	0800	0800	6.5			
0.1	4	KN	03/30/00	0800	0800	6.0			
0.1	4	KN	03/30/00	1635	1635	5.0			
0.1	4	KN	03/31/00	?	?	5.0	8AM draw: no time rec		
0.1	4	KN	04/11/00	0800	0800	5.5			
0.1	5	JF	03/08/00	1500	1500	4.5			
0.1	5	JF	03/16/00	0815	0815	3.5			
0.1	5	JF	03/21/00	1152	1152	4.5			
0.1	5	JF	03/21/00	1550	1550	4.5			
0.1	5	JF	03/22/00	0800	0800	3.5			
0.1	5	JF	03/22/00	1715	1715	3.5			
0.1	5	JF	03/23/00	0845	0845	3.0			

## Att. 5 - Pino Serum Iodine Results 2001-04-26.xls

Dose	Set/G rp.	Subject	Sampling Date	Sampling Time-P&P	Sampling Time-Corr.	Serum I (mcg/dl)	Source of Time Correction		Notes
0.1	5	JF	03/24/00	0825	0825	3.5			
0.1	5	JF	03/24/00	1140	1140	3.5			
0.1	5	JF	03/28/00	0915	0915	4.0			
0.1	5	JF	04/03/00	0750	0750	3.5			
0.1	5	JF	04/03/00	1145	1145	4.0			
0.1	5	JF	04/03/00	1645	1645	4.5			
0.1	5	JF	04/04/00	0855	0855	3.0			
0.1	5	JF	04/04/00	1200	1200	3.0			
0.1	5	JF	04/04/00	1640	1640	4.5			
0.1	5	JF	04/05/00	0755	0755	3.5			
0.1	5	JF	04/05/00	1645	1645	3.5			
0.1	5	JF	04/06/00	0740	0740	3.0			
0.1	5	JF	04/06/00	1640	1640	4.0			
0.1	5	JF	04/07/00	0755	0755	4.0			
0.1	5	JF	04/18/00	0805	0805	3.5			
0.1	6	RB1	03/15/00	1330	1330	5.8			
0.1	6	RB1	03/23/00	0800	0800	5.5			
0.1	6	RB1	03/28/00	1210	1210	5.2			
0.1	6	RB1	03/28/00	1552	1552	5.0			
0.1	6	RB1	03/29/00	0750	0750	5.8			
0.1	6	RB1	03/29/00	1200	1200	5.0			
0.1	6	RB1	03/29/00	1715	1715	5.2			
0.1	6	RB1	03/30/00	0915	0915	5.5			
0.1	6	RB1	03/31/00	0810	0810	5.8			
0.1	6	RB1	03/31/00	1205	1205	5.5			
0.1	6	RB1	04/04/00	1055	1055	6.2			
0.1	6	RB1	04/10/00	0750	0750	5.8			
0.1	6	RB1	04/10/00	1205	1205	6.2			
0.1	6	RB1	04/10/00	1700	1700	4.2			
0.1	6	RB1	04/11/00	0835	0835	6.8			
0.1	6	RB1	04/11/00	1225	1225	6.2			
0.1	6	RB1	04/11/00	1640	1640	6.0			
0.1	6	RB1	04/12/00	0755	0755	5.8			
0.1	6	RB1	04/12/00	1645	1645	5.0			
0.1	6	RB1	04/13/00	0750	0750	6.0			
0.1	6	RB1	04/13/00	1645	1645	5.2			
0.1	6	RB1	04/14/00	0845	0845	4.2			
0.1	6	RB1	04/25/00	0810	0810	6.2			
0.1	7	AH	03/24/00	1600	1600	4.2			
0.1	7	AH	03/30/00	0810	0810	5.2			
0.1	7	AH	04/04/00	1545	1545	4.8			
0.1	7	AH	04/04/00	1210	1210	4.8			
0.1	7	AH	04/05/00	0805	0805	4.5			
0.1	7	AH	04/05/00	1650	1650	4.5			
0.1	7	AH	04/05/00	1210	1210	4.5			
0.1	7	AH	04/06/00	0900	0900	4.5			
0.1	7	AH	04/07/00	0800	0800	4.0			
0.1	7	AH	04/07/00	1200	1200	7.0			
0.1	7	AH	04/11/00	0900	0900	4.5			
0.1	7	AH	04/17/00	1200	1200	3.2			
0.1	7	AH	04/17/00	1700	1700	5.2			
0.1	7	AH	04/17/00	0800	0800	4.8			

## Att. 5 - Pino Serum Iodine Results 2001-04-26.xls

Dose	Set/G rp.	Subject	Sampling Date	Sampling Time-P&P	Sampling Time-Corr.	Serum I (mcg/dl)	Source of Time Correction		Notes
0.1	7	AH	04/18/00	0802	0802	4.5			
0.1	7	AH	04/18/00	1200	1200	5.0			
0.1	7	AH	04/18/00	1650	1650	4.5			
0.1	7	AH	04/19/00	1705	1705	4.5			
0.1	7	AH	04/19/00	0805	0805	4.5			
0.1	7	AH	04/20/00	1645	1645	4.8			
0.1	7	AH	04/20/00	0815	0815	4.8			
0.1	7	AH	04/21/00	0800	0800	4.0			
0.1	7	AH	05/02/00	0815	0815	4.8			
0.1	8	SG	03/31/00	1240	1240	7.5			
0.1	8	SG	04/06/00	0815	0815	7.3			
0.1	8	SG	04/11/00	1200	1200	7.3			
0.1	8	SG	04/11/00	1600	1600	8.3			
0.1	8	SG	04/12/00	0815	0815	6.5			
0.1	8	SG	04/12/00	?	1200	6.8	AI, AP, LT		
0.1	8	SG	04/12/00	1655	1655	7.0			
0.1	8	SG	04/13/00	0900	0900	7.5			
0.1	8	SG	04/14/00	0825	0825	7.0			
0.1	8	SG	04/14/00	1200	1200	6.8			
0.1	8	SG	04/18/00	0950	0950	7.5			
0.1	8	SG	04/24/00	0815	0815	4.5			
0.1	8	SG	04/24/00	1210	1210	7.5			
0.1	8	SG	04/24/00	1737	1737	7.3			
0.1	8	SG	04/25/00	0915	0915	8.0			
0.1	8	SG	04/25/00	1645	1645	7.3			
0.1	8	SG	04/25/00	1200	1200	7.8			
0.1	8	SG	04/26/00	0815	0815	7.0			
0.1	8	SG	04/26/00	1640	1640	6.8			
0.1	8	SG	04/27/00	0810	0810	7.0			
0.1	8	SG	04/27/00	?	1635	6.5	AI, AP		
0.1	8	SG	04/28/00	0812	0812	6.5			
0.1	8	SG	05/09/00	0840	0840	7.0			
0.1	9	AB2	04/04/00	1235	1235	3.8			
0.1	9	AB2	04/13/00	0810	0810	3.8			
0.1	9	AB2	04/18/00	1210	1210	3.8			
0.1	9	AB2	04/18/00	1600	1600	3.8			
0.1	9	AB2	04/19/00	0845	0845	4.0			
0.1	9	AB2	04/19/00	1230	1230	3.8			
0.1	9	AB2	04/19/00	1635	1635	3.5			
0.1	9	AB2	04/20/00	0855	0855	4.2			
0.1	9	AB2	04/21/00	0845	0845	5.0			
0.1	9	AB2	04/21/00	1205	1205	4.0			
0.1	9	AB2	04/25/00	0910	0910	4.0			
0.1	9	AB2	05/01/00	0830	0830	4.0			
0.1	9	AB2	05/02/00	0840	0840	4.0			
0.1	9	AB2	05/02/00	1205	1205	3.5			
0.1	9	AB2	05/02/00	1720	1720	3.8			
0.1	9	AB2	05/03/00	0910	0910	3.5			
0.1	9	AB2	05/03/00	1210	1210	4.0			
0.1	9	AB2	05/03/00	1710	1710	4.5			
0.1	9	AB2	05/04/00	1700	1700	4.0			
0.1	9	AB2	05/04/00	0830	0830	3.5			

## Att. 5 - Pino Serum Iodine Results 2001-04-26.xls

Dose	Set/G rp.	Subject	Sampling Date	Sampling Time-P&P	Sampling Time-Corr.	Serum I (mcg/dl)	Source of Time Correction		Notes
0.1	9	AB2	05/05/00	1630	1630	4.2			
0.1	9	AB2	05/05/00	0840	0840	3.8			
0.1	9	AB2	05/06/00	1040	1040	3.5			
0.1	9	AB2	05/17/00	0940	0940	3.8			
0.02	1	SV	02/17/00	0925	0925	6.5			
0.02	1	SV	02/22/00	1155	1155	6.5			
0.02	1	SV	02/22/00	?	1545	6.5	AI, AP, LT		
0.02	1	SV	02/23/00	0805	0805	7.5			
0.02	1	SV	02/23/00	1300	1300	7.0			
0.02	1	SV	02/23/00	1545	1545	6.5			
0.02	1	SV	02/24/00	0810	0810	7.5			
0.02	1	SV	02/25/00	0810	0810	7.5			
0.02	1	SV	02/25/00	1155	1155	7.5			
0.02	1	SV	02/29/00	?	0935	7.5	AI, AP, LT		
0.02	1	SV	03/07/00	0820	0820	7.0			
0.02	1	SV	03/07/00	1145	1145	6.5			
0.02	1	SV	03/07/00	1650	1650				
0.02	1	SV	03/08/00	0940	0940	7.0			
0.02	1	SV	03/08/00	1245	1245	7.0			
0.02	1	SV	03/08/00	1700	1700	7.5			
0.02	1	SV	03/09/00	0815	0815	7.0			
0.02	1	SV	03/09/00	1720	1720	6.0			
0.02	1	SV	03/10/00	0810	0810	7.0			
0.02	1	SV	03/10/00	1700	1700	6.5			
0.02	1	SV	03/11/00	0800	0800	7.0			
0.02	1	SV	03/22/00	0815	0815	7.0			
0.02	2	CB	02/23/00	0755	0755	5.5			
0.02	2	CB	02/24/00	0900	0900	4.8			
0.02	2	CB	02/29/00	1155	1155	4.0			
0.02	2	CB	02/29/00	1545	1545	4.3			
0.02	2	CB	03/01/00	1200	1200	3.8			
0.02	2	CB	03/01/00	1545	1545	5.3			
0.02	2	CB	03/02/00	0930	0930	4.5			
0.02	2	CB	03/03/00	0800	0800	5.0			
0.02	2	CB	03/03/00	1145	1145	4.5			
0.02	2	CB	03/07/00	0815	0815	4.3			
0.02	2	CB	03/13/00	0805	0805	4.3			
0.02	2	CB	03/13/00	1155	1155	5.0			
0.02	2	CB	03/13/00	1655	1655	4.8			
0.02	2	CB	03/14/00	1024	1024	4.5			
0.02	2	CB	03/14/00	1200	1200	4.3			
0.02	2	CB	03/14/00	1700	1700	5.0			
0.02	2	CB	03/15/00	0740	0740	4.0			
0.02	3	QY	02/25/00	1340	1340	7.5			
0.02	3	QY	03/02/00	0845	0845	5.3			
0.02	3	QY	03/07/00	1545	1545	6.5			
0.02	3	QY	03/08/00	1200	1200	6.0			
0.02	3	QY	03/08/00	0810	0810	7.3			
0.02	3	QY	03/08/00	1552	1552	7.3			
0.02	3	QY	03/09/00	0930	0930	5.9			
0.02	3	QY	03/10/00	1205	1205	8.2			
0.02	3	QY	03/10/00	0820	0820	6.3			

Dose	Set/G rp.	Subject	Sampling Date	Sampling Time-P&P	Sampling Time-Corr.	Serum I (mcg/dl)	Source of Time Correction		Notes
0.02	3	QY	03/14/00	1450	1450	6.5			
0.02	3	QY	03/20/00	0815	0815	6.0			
0.02	3	QY	03/20/00	1200	1200	4.8			
0.02	3	QY	03/20/00	1700	1700	6.1			
0.02	3	QY	03/21/00	0905	0905	5.6			
0.02	3	QY	03/21/00	1205	1205	6.1			
0.02	3	QY	03/21/00	1640	1640	3.8			
0.02	3	QY	03/22/00	0800	0800	7.0			
0.02	3	QY	03/22/00	1710	1710	7.0			
0.02	3	QY	03/23/00	0805	0805	8.1			
0.02	3	QY	03/23/00	1715	1715	8.8			
0.02	3	QY	03/24/00	0810	0810	7.5			
0.02	3	QY	04/04/00	0840	0840	7.0			
0.02	4	DH	03/02/99	1405	1405	6.0			
0.02	4	DH	03/02/00	1705	1705	6.3			
0.02	4	DH	03/09/00	0845	0845	4.9			
0.02	4	DH	03/14/00	1215	1215	6.0			
0.02	4	DH	03/14/00	1550	1550	5.5			
0.02	4	DH	03/15/00	0810	0810	6.3			
0.02	4	DH	03/15/00	1150	1150				QNS
0.02	4	DH	03/15/00	1645	1645	5.5			
0.02	4	DH	03/16/00	0920	0920	5.2			
0.02	4	DH	03/17/00	0810	0810	5.8			
0.02	4	DH	03/17/00	1200	1200	5.7			
0.02	4	DH	03/21/00	1010	1010	4.4			
0.02	4	DH	03/27/00	0818	0818	5.8			
0.02	4	DH	03/27/00	1202	1202	4.8			
0.02	4	DH	03/28/00	0815	0815	4.8			
0.02	4	DH	03/28/00	0910	0910	4.6			
0.02	4	DH	03/28/00	1200	1200	5.3			
0.02	4	DH	03/28/00	1705	1705	4.8			
0.02	4	DH	03/29/00	1700	1700	5.4			
0.02	4	DH	03/30/00	0750	0750	5.7			
0.02	4	DH	03/30/00	1705	1705	5.4			
0.02	4	DH	03/31/00	0820	0820	4.9			
0.02	4	DH	04/11/00	0825	0825	4.7			
0.02	5	JS2	02/24/00	?	1500	4.0	LT, LB, LC		
0.02	5	JS2	03/16/00	0805	0805	4.5			
0.02	5	JS2	03/21/00	1200	1200	4.0			
0.02	5	JS2	03/21/00	1552	1552	4.0			
0.02	5	JS2	03/22/00	1200	1200	4.0			
0.02	5	JS2	03/22/00	1700	1700	4.0			
0.02	5	JS2	03/22/00	1830	1830	4.5			
0.02	5	JS2	03/23/00	0845	0845	3.5			
0.02	5	JS2	03/24/00	0805	0805	4.0			
0.02	5	JS2	03/24/00	1200	1200	4.0			
0.02	5	JS2	03/28/00	0950	0950	4.0			
0.02	5	JS2	04/03/00	0820	0820	4.5			
0.02	5	JS2	04/03/00	1155	1155	3.0			
0.02	5	JS2	04/03/00	1700	1700	5.0			
0.02	5	JS2	04/04/00	0910	0910	4.0			
0.02	5	JS2	04/04/00	1155	1155	3.5			

## Att. 5 - Pino Serum Iodine Results 2001-04-26.xls

Dose	Set/G rp.	Subject	Sampling Date	Sampling Time-P&P	Sampling Time-Corr.	Serum I (mcg/dl)	Source of Time Correction		Notes
0.02	5	JS2	04/04/00	1655	1655	4.5			
0.02	5	JS2	04/05/00	0825	0825	3.0			
0.02	5	JS2	04/05/00	1700	1700	4.0			
0.02	5	JS2	04/06/00	0830	0830	3.5			
0.02	5	JS2	04/06/00	1700	1700	3.5			
0.02	5	JS2	04/07/00	0810	0810	4.0			
0.02	5	JS2	04/18/00	0810	0810	3.5			
0.02	6	SK	03/02/00	1150	1150	7.0			
0.02	6	SK	03/23/00	0815	0815	6.3			
0.02	6	SK	03/28/00	1158	1158	7.3			
0.02	6	SK	03/28/00	1550	1550	8.3			
0.02	6	SK	03/29/00	0805	0805	7.0			
0.02	6	SK	03/29/00	1200	1200	7.0			
0.02	6	SK	03/29/00	1645	1645	7.4			
0.02	6	SK	03/30/00	0845	0845	8.8			
0.02	6	SK	03/31/00	0755	0755	7.5			
0.02	6	SK	03/31/00	1200	1200	7.9			
0.02	6	SK	04/04/00	1045	1045	9.3			
0.02	6	SK	04/10/00	1200	1200	7.4			
0.02	6	SK	04/10/00	0800	0800	7.0			
0.02	6	SK	04/10/00	1640	1640	7.5			
0.02	6	SK	04/11/00	0855	0855	8.2			
0.02	6	SK	04/11/00	1155	1155	5.5			
0.02	6	SK	04/11/00	1700	1700	5.5			
0.02	6	SK	04/12/00	0800	0800	5.3			
0.02	6	SK	04/12/00	1650	1650	5.5			
0.02	6	SK	04/13/00	1640	1640	6.0			
0.02	6	SK	04/13/00	0810	0810	6.0			
0.02	6	SK	04/14/00	0800	0800	7.0			
0.02	6	SK	04/25/00	0805	0805	8.2			
0.02	8	DC	03/30/00	1625	1625	10.2			
0.02	8	DC	04/06/00	0810	0810	9.4			
0.02	8	DC	04/11/00	1200	1200	9.7			
0.02	8	DC	04/11/00	1600	1600	9.7			
0.02	8	DC	04/12/00	0820	0820	8.2			
0.02	8	DC	04/12/00	?	1210	10.7	AI, AP, LT		
0.02	8	DC	04/12/00	1700	1700	9.9			
0.02	8	DC	04/13/00	0900	0900	10.4			
0.02	8	DC	04/14/00	0750	0750	10.4			
0.02	8	DC	04/14/00	1155	1155	9.7			
0.02	8	DC	04/18/00	0935	0935	10.9			
0.02	8	DC	04/24/00	0810	0810	9.4			
0.02	8	DC	04/24/00	1210	1210	9.6			
0.02	8	DC	04/24/00	1640	1640	8.8			
0.02	8	DC	04/25/00	0915	0915	9.1			
0.02	8	DC	04/25/00	1215	1215	8.6			
0.02	8	DC	04/25/00	1650	1650	8.3			
0.02	8	DC	04/26/00	0805	0805	9.3			
0.02	8	DC	04/26/00	1630	1630	7.8			
0.02	8	DC	04/27/00	0755	0755	8.3			
0.02	8	DC	04/27/00	?	1637	8.1	AI, AP		
0.02	8	DC	04/28/00	0815	0815	7.8			

Dose	Set/G rp.	Subject	Sampling	Sampling	Sampling	Serum I	Source of
			Date	Time-P&P	Time-Corr.	(mcg/dl)	Time Correction
0.02	8	DC	05/09/00	0810	0810	8.7	
0.02	9	GB	04/10/00	1400	1400	5.8	
0.02	9	GB	04/13/00	0815	0815	6.0	
0.02	9	GB	04/18/00	1210	1210	4.7	
0.02	9	GB	04/18/00	1600	1600	4.0	
0.02	9	GB	04/19/00	0805	0805	5.2	
0.02	9	GB	04/19/00	1145	1145	6.5	
0.02	9	GB	04/19/00	1650	1650	5.5	
0.02	9	GB	04/20/00	0920	0920	6.0	
0.02	9	GB	04/21/00	0824	0824	5.3	
0.02	9	GB	04/21/00	1210	1210	4.9	
0.02	9	GB	04/25/00	0955	0955	5.5	
0.02	9	GB	05/01/00	0805	0805	4.4	
0.02	9	GB	05/02/00	0825	0825	4.8	
0.02	9	GB	05/02/00	1210	1210	5.3	
0.02	9	GB	05/02/00	1655	1655	6.3	
0.02	9	GB	05/03/00	0905	0905	4.0	
0.02	9	GB	05/03/00	1200	1200	5.3	
0.02	9	GB	05/03/00	1700	1700	6.3	
0.02	9	GB	05/04/00	0825	0825	5.8	
0.02	9	GB	05/04/00	1655	1655	4.8	
0.02	9	GB	05/05/00	0830	0830	4.5	
0.02	9	GB	05/05/00	?	1700	4.5	AI, AP
0.02	9	GB	05/06/00	0815	0815	5.0	
0.02	9	GB	05/17/00	0530	0530	4.5	

**Abbreviations**

P&amp;P = Pino &amp; Previti (Data from 9/13/00 final results)

Corr. = Corrected

AI = Aaron file, iodine samples

AP = Aaron file, perchlorate samples

LB = Linda file, CBC samples

LC = Linda file, serum chemistry samples

LT = Linda file, thyroid function samples

QNS = Quantity not sufficient for analysis

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.5	1	AN	02/16/00	1120	11:20 AM	4.5		8	120
0.5	1	AN	02/16/00	1415	2:15 PM	6.5		8	140
0.5	1	AN	02/16/00	1610	4:10 PM	11.5		8	80
0.5	1	AN	02/16/00	1900	7:00 PM	9.2		8	170
0.5	1	AN	02/16/00	2050	8:50 PM	3.20		8	240
0.5	1	AN	02/17/00	0040	12:40 AM	4.0		8	530
0.5	1	AN	02/17/00	0700	7:00 AM	9.8		8	230
0.5	1	AN	02/22/00	0940		6.2		11	420
0.5	1	AN	02/22/00	1155		14.5		11	330
0.5	1	AN	02/22/00	1530		17.5		11	350
0.5	1	AN	02/22/00	1830		12.2		11	330
0.5	1	AN	02/22/00	2305		44.0		11	130
0.5	1	AN	02/23/00	0700		13.2		11	800
0.5	1	AN	02/23/00	0830		8.8		11	450
0.5	1	AN	02/23/00	1035		6.8		11	434
0.5	1	AN	02/23/00	1614		14.5		11	340
0.5	1	AN	02/23/00	2205		13.8		11	300
0.5	1	AN	02/24/00	0730		21.0		11	380
0.5	1	AN	02/24/00	0815		9.0		8	65
0.5	1	AN	02/29/00	1145		16.0		8	340
0.5	1	AN	02/29/00	1610		49.0		8	210
0.5	1	AN	02/29/00	1830		19.8		8	210
0.5	1	AN	02/29/00	2015		22.5		8	100
0.5	1	AN	02/29/00	2330		11.0		8	760
0.5	1	AN	03/01/00	0720		20.2		8	595
0.5	1	AN	03/01/00	0910		6.8		8	700
0.5	1	AN	03/06/00			21.5		1,8	1450
0.5	1	AN	03/07/00	0935	9:35 AM	6.2		8	410
0.5	1	AN	03/07/00	1140	11:40 AM	17.0		8	330
0.5	1	AN	03/07/00	1900	7:00 PM	50.0		8	120
0.5	1	AN	03/07/00	2120	9:20 PM	49.0		8	90
0.5	1	AN	03/07/00	2330	11:30 PM	52.0		8	100
0.5	1	AN	03/08/00	0630	6:30 AM	21.2		8	690
0.5	1	AN	03/08/00			12.8		1,8	2300
0.5	1	AN	03/20/00			13.5		1,8	2480
0.5	2	DR	02/23/00	0025		4.5		8	1000
0.5	2	DR	02/23/00	1230		4.5		8	1000
0.5	2	DR	02/23/00	2100		7.0		8	510
0.5	2	DR	02/24/00	0039		5.0		8	400
0.5	2	DR	02/24/00	0640		6.3		8	433
0.5	2	DR	02/29/00	1118		7.0		8	710
0.5	2	DR	02/29/00	1420		9.8		8	600
0.5	2	DR	02/29/00	1720		9.5		8	500
0.5	2	DR	02/29/00	19:30				2,8	
0.5	2	DR	02/29/00	2235		15.5		8	340
0.5	2	DR	03/01/00	0014		24.3		8	150
0.5	2	DR	03/01/00	0500		6.3		8	290
0.5	2	DR	03/01/00	1030	10:30 AM	12.0		8	1000
0.5	2	DR	03/01/00	1300				2,8	650
0.5	2	DR	03/01/00	1830		15.3		8	440

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.5	2	DR	03/01/00	2040		10.3		8	340
0.5	2	DR	03/01/00	2230				2,8	350
0.5	2	DR	03/01/00	2300				2,8	250
0.5	2	DR	03/02/00	0300				2,8	1120
0.5	2	DR	03/07/00	1830	6:30 PM	15.8		8	930
0.5	2	DR	03/07/00	2130	9:30 PM	29.3		8	320
0.5	2	DR	03/07/00	2330	11:30 PM	65.0		8	110
0.5	2	DR	03/08/00	0800	8:00 AM	39.0		8	800
0.5	2	DR	03/13/00					1,8	2800
0.5	2	DR	03/14/00	1100	11:00 AM	36.5		8	710
0.5	2	DR	03/14/00	1500	3:00 PM	19.0		8	720
0.5	2	DR	03/14/00	2330	11:30 PM	35.5		8	200
0.5	2	DR	03/15/00	0700	7:00 AM	33.3		8	410
0.5	2	DR	03/15/00			26.5		1,8	1340
0.5	2	DR	03/27/00			7.5		1,8	2120
0.5	3	JS1	03/01/00	1400		28.0			230
0.5	3	JS1	03/01/00	1645		12.6			165
0.5	3	JS1	03/01/00	1750		11.2			70
0.5	3	JS1	03/01/00	2315		10.2			230
0.5	3	JS1	03/02/00	0515		14.8			140
0.5	3	JS1	03/07/00	1100		25.3			120
0.5	3	JS1	03/07/00	1700		16.4			225
0.5	3	JS1	03/08/00	0615		32.8			290
0.5	3	JS1	03/08/00	1100		14.2			230
0.5	3	JS1	03/08/00	1640		8.9			310
0.5	3	JS1	03/08/00	2140		11.5			120
0.5	3	JS1	03/09/00	0635		18.9			280
0.5	3	JS1	03/14/00	1340		11.5			320
0.5	3	JS1	03/14/00	1450		19.6			30
0.5	3	JS1	03/14/00	2015		27.2			190
0.5	3	JS1	03/15/00	0630		28.9			260
0.5	3	JS1	03/20/00			10.8		1	1335
0.5	3	JS1	03/21/00	1350		15.7			345
0.5	3	JS1	03/21/00	1805		13.5			170
0.5	3	JS1	03/21/00	2220		23.5			160
0.5	3	JS1	03/22/00	0600		27.0			200
0.5	3	JS1	03/22/00			8.6		1	935
0.5	3	JS1	04/03/00			7.3		1	1885
0.5	4	CW	03/08/00	1620	4:20 PM			5	
0.5	4	CW	03/08/00	2140	9:40 PM	35.8			145
0.5	4	CW	03/08/00	2330	11:30 PM	11.1			155
0.5	4	CW	03/09/00	0100	1:00 AM	3.5			630
0.5	4	CW	03/09/00	0400	4:00 AM	6.0			495
0.5	4	CW	03/09/00	0615	6:15 AM	8.8			200
0.5	4	CW	03/14/00	1030	10:30 AM	48.9			155
0.5	4	CW	03/14/00	1510	3:10 PM	54.0			200
0.5	4	CW	03/14/00	1720	5:20 PM	46.9			200
0.5	4	CW	03/14/00	2220	10:20 PM	45.4			410
0.5	4	CW	03/15/00	0345	3:45 AM	19.7			550
0.5	4	CW	03/15/00	0600	6:00 AM	23.0			265

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.5	4	CW	03/15/00	0740	7:40 AM	34.8			55
0.5	4	CW	03/15/00	1310		32.6			285
0.5	4	CW	03/15/00	1820		22.7			290
0.5	4	CW	03/15/00	2155		13.2			420
0.5	4	CW	03/15/00	2310		47.0			35.5
0.5	4	CW	03/16/00	0140		11.1			500
0.5	4	CW	03/16/00	0620		22.2			350
0.5	4	CW	03/21/00	1240	12:40 PM	26.4			155
0.5	4	CW	03/21/00	1935		49.0			175
0.5	4	CW	03/21/00	2230		43.9			85
0.5	4	CW	03/22/00	0640		42.5			335
0.5	4	CW	03/27/00			13.2		1	1205
0.5	4	CW	03/28/00	0910	9:10 AM	9.3			125
0.5	4	CW	03/28/00	1345	1:45 PM	28.0			180
0.5	4	CW	03/28/00	1705	5:05 PM	25.7			195
0.5	4	CW	03/28/00	2020	8:20 PM	16.0			270
0.5	4	CW	03/29/00	0000	12:00 AM	9.9			390
0.5	4	CW	03/29/00	0315	3:15 AM	4.8			510
0.5	4	CW	03/29/00	0605	6:05 AM	5.1			400
0.5	4	CW	03/29/00			9.9		1	1710
0.5	4	CW	04/10/00			6.8		1	1240
0.5	5	TO	03/15/00	1500		9.3			470
0.5	5	TO	03/15/00	1745		18.6			175
0.5	5	TO	03/15/00	1916		5.5			460
0.5	5	TO	03/15/00	2234		5.0			388
0.5	5	TO	03/16/00	0710		12.5			445
0.5	5	TO	03/21/00	0800	8:00 AM	53.6		3	40
0.5	5	TO	03/21/00	1200	12:00 PM	39.6		3	250
0.5	5	TO	03/21/00	1600	4:00 PM	29.6		3	330
0.5	5	TO	03/21/00	2300	11:00 PM	34.4		4	250
0.5	5	TO	03/22/00	0800	8:00 AM	14.5		3	300
0.5	5	TO	03/22/00	1200	12:00 PM	8.6		3	298
0.5	5	TO	03/22/00	1600	4:00 PM	11.8		3	295
0.5	5	TO	03/22/00	2000	8:00 PM	3.5		3	2750
0.5	5	TO	03/23/00	0200	2:00 AM	3.3		4	650
0.5	5	TO	03/28/00	0800	8:00 AM	36.7		3	135
0.5	5	TO	03/28/00	1200	12:00 PM	14.8		3	220
0.5	5	TO	03/28/00	1600	4:00 PM	5.7		3	1500
0.5	5	TO	03/28/00	2000	8:00 PM	5.6		3	1050
0.5	5	TO	03/28/00	2300	11:00 PM	46.1		4	345
0.5	5	TO	04/03/00			13.7		1	2252
0.5	5	TO	04/04/00	0800	8:00 AM	18.5		3	280
0.5	5	TO	04/04/00	1200	12:00 PM	14.5		3	450
0.5	5	TO	04/04/00	1600	4:00 PM			5	340
0.5	5	TO	04/04/00	2000	8:00 PM	6.8		3	1105
0.5	5	TO	04/04/00	2300	11:00 PM	9.6		4	500
0.5	5	TO	04/05/00			20.3		1	890
0.5	5	TO	04/17/00			85.9		1	1355
0.5	6	MA	03/22/00	0800		21.1	31.7	3	635
0.5	6	MA	03/22/00	1200		13.6		3	555

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.5	6	MA	03/22/00	1600		10.6		3	678
0.5	6	MA	03/22/00	2000		8.3		3	438
0.5	6	MA	03/23/00	0000	12:00 AM	42.2		4	264
0.5	6	MA	03/28/00	0800		19.4		3	720
0.5	6	MA	03/28/00	1200		13.1		3	687
0.5	6	MA	03/28/00	1600		21.3		3	174
0.5	6	MA	03/28/00	2000		78.2		3	105
0.5	6	MA	03/29/00	0000	12:00 AM	68.1		4	395
0.5	6	MA	03/29/00	0800		15.8		3	974
0.5	6	MA	03/29/00	1200		30.4		3	265
0.5	6	MA	03/29/00	1600		34.1		3	386
0.5	6	MA	03/29/00	2000		50.4		3	181
0.5	6	MA	03/30/00	0000	12:00 AM	63.1		4	214
0.5	6	MA	04/04/00	0800		10.7		3	598
0.5	6	MA	04/04/00	1200		41.0		3	295
0.5	6	MA	04/04/00	1600		16.0		3	845
0.5	6	MA	04/04/00	2000		17.7		3	670
0.5	6	MA	04/05/00	0000	12:00 AM	57.6		4	687
0.5	6	MA	04/10/00			50.2		1	1667
0.5	6	MA	04/11/00	0800		53.6		3	137
0.5	6	MA	04/11/00	1200		37.6		3	230
0.5	6	MA	04/11/00	1600		12.9		3	675
0.5	6	MA	04/11/00	2000		11.0		3	483
0.5	6	MA	04/12/00	0000	12:00 AM	25.2		4	459
0.5	6	MA	04/12/00			16.9		1	1761
0.5	6	MA	04/24/00			23.9		1	2169
0.5	7	AB1	03/29/00	0800	8:00 AM	17.7		3	230
0.5	7	AB1	03/29/00	1200	12:00 PM	48.8		3	215
0.5	7	AB1	03/29/00	1600	4:00 PM	33.5		3	205
0.5	7	AB1	03/29/00	2000	8:00 PM	60.0		3	125
0.5	7	AB1	03/29/00	2200	10:00 PM	24.4		4	720
0.5	7	AB1	04/04/00	0800	8:00 AM	12.3		3	365
0.5	7	AB1	04/04/00	1200	12:00 PM	37.7		3	180
0.5	7	AB1	04/04/00	1600	4:00 PM	27.5		3	190
0.5	7	AB1	04/04/00	2000	8:00 PM	15.2		3	140
0.5	7	AB1	04/04/00	2300	11:00 PM	61.0		4	530
0.5	7	AB1	04/05/00	0800	8:00 AM	30.5		3	430
0.5	7	AB1	04/05/00	1200	12:00 PM	19.3		3	330
0.5	7	AB1	04/05/00	1600	4:00 PM	17.8		3	225
0.5	7	AB1	04/05/00	2000	8:00 PM	10.3		3	390
0.5	7	AB1	04/05/00	2200	10:00 PM	23.3		4	705
0.5	7	AB1	04/11/00	0800	8:00 AM	4.1		3	350
0.5	7	AB1	04/11/00	1200	12:00 PM	15.1		3	210
0.5	7	AB1	04/11/00	1600	4:00 PM	12.0		3	200
0.5	7	AB1	04/11/00	2000	8:00 PM	13.0		3	155
0.5	7	AB1	04/11/00	2200	10:00 PM	8.6		4	1075
0.5	7	AB1	04/17/00			6.1		1	2225
0.5	7	AB1	04/18/00	0800	8:00 AM	5.0		3	455
0.5	7	AB1	04/18/00	1200	12:00 PM	12.5		3	680
0.5	7	AB1	04/18/00	1600	4:00 PM	9.6		3	570

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.5	7	AB1	04/18/00	2000	8:00 PM	4.6		3	320
0.5	7	AB1	04/18/00	2300	11:00 PM	26.8		4	565
0.5	7	AB1	04/19/00			14.0		1	2025
0.5	7	AB1	05/01/00			6.6		1	1530
0.5	8	RC	04/05/00	1120	11:20 AM	43.5			150
0.5	8	RC	04/05/00	1500	3:00 PM	38.0			120
0.5	8	RC	04/05/00	2130	9:30 PM			5	120
0.5	8	RC	04/05/00	2320	11:20 PM	16.6			110
0.5	8	RC	04/06/00	0630	6:30 AM	23.9			460
0.5	8	RC	04/11/00	0800	8:00 AM	38.0		3	136
0.5	8	RC	04/11/00	1200	12:00 PM	35.9		3	195
0.5	8	RC	04/11/00	1600	4:00 PM	22.5		3	240
0.5	8	RC	04/11/00	2000	8:00 PM	29.4		3	260
0.5	8	RC	04/11/00	2300	11:00 PM	16.4		4	660
0.5	8	RC	04/12/00	0800	8:00 AM	43.9		3	160
0.5	8	RC	04/12/00	1200	12:00 PM	17.1		3	312
0.5	8	RC	04/12/00	1600	4:00 PM	10.9		3	235
0.5	8	RC	04/12/00	2000	8:00 PM	27.6		3	105
0.5	8	RC	04/12/00	2300	11:00 PM	10.1		4	310
0.5	8	RC	04/18/00	0800	8:00 AM	14.9		3	156
0.5	8	RC	04/18/00	1200	12:00 PM	41.2		3	327
0.5	8	RC	04/18/00	1600	4:00 PM	21.8		3	420
0.5	8	RC	04/18/00	2000	8:00 PM	10.8		3	164
0.5	8	RC	04/18/00	2300	11:00 PM	21.1		3	275
0.5	8	RC	04/24/00			9.3		1	1628
0.5	8	RC	04/25/00	0800	8:00 AM	14.9		3	195
0.5	8	RC	04/25/00	1200	12:00 PM	7.4		3	287
0.5	8	RC	04/25/00	1600	4:00 PM	8.9		3	210
0.5	8	RC	04/25/00	2000	8:00 PM	18.7		3	90
0.5	8	RC	04/25/00	2045	8:45 PM			5	
0.5	8	RC	04/25/00	2300	11:00 PM	10.8		4	380
0.5	8	RC	04/26/00			10.0		1,10	1662
0.5	8	RC	05/08/00			12.4		1	1182
0.5	11	BR	04/26/00			3.8		1	1300
0.5	11	BR	05/15/00			13.2		1	2448
0.5	12	NA	05/03/00			9.4		1	3940
0.5	12	NA	05/22/00			7.3		1	2980
0.1	1	RT	02/16/00	0745		17.2		8	100
0.1	1	RT	02/16/00	0925		7.8		8	350
0.1	1	RT	02/16/00	1055		2.6		8	390
0.1	1	RT	02/16/00	1140		2.4		8	250
0.1	1	RT	02/16/00	1350		3.2		8	330
0.1	1	RT	02/16/00	1510		3.5		8	430
0.1	1	RT	02/16/00	1615		4.0		8	180
0.1	1	RT	02/16/00	1710		18.0		8	190
0.1	1	RT	02/16/00	2130		7.5		8	270
0.1	1	RT	02/16/00	2300		5.0		8	260
0.1	1	RT	02/17/00	0530		9.0		8	210
0.1	1	RT	02/22/00	0805		3.8			435
0.1	1	RT	02/22/00	0910		1.8			400

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.1	1	RT	02/22/00	1035		1.8			475
0.1	1	RT	02/22/00	1130		1.9			320
0.1	1	RT	02/22/00	1245		1.5			380
0.1	1	RT	02/22/00	1445		3.8			455
0.1	1	RT	02/22/00	1540		2.9			290
0.1	1	RT	02/22/00	1715		2.5			315
0.1	1	RT	02/22/00	2105		6.8			340
0.1	1	RT	02/22/00	2230		6.0			175
0.1	1	RT	02/23/00	0240	2:40 AM			5	
0.1	1	RT	02/23/00	0540		10.2			175
0.1	1	RT	02/23/00	0850		5.8			350
0.1	1	RT	02/23/00	1035		2.3			370
0.1	1	RT	02/23/00	1140		2.3			245
0.1	1	RT	02/23/00	1400		2.8			680
0.1	1	RT	02/23/00	1505		2.0			450
0.1	1	RT	02/23/00	1725	5:25 PM			5	
0.1	1	RT	02/23/00	1945		6.8			215
0.1	1	RT	02/23/00	2120		4.5			330
0.1	1	RT	02/23/00	2150		2.8			215
0.1	1	RT	02/24/00	0048		3.2			790
0.1	1	RT	02/24/00	0535		6.5			490
0.1	1	RT	02/29/00	0910		32.2			265
0.1	1	RT	02/29/00	1200		11.2			500
0.1	1	RT	02/29/00	1515		13.0			425
0.1	1	RT	02/29/00	1715		16.5			250
0.1	1	RT	02/29/00	2055		14.2			240
0.1	1	RT	02/29/00	2130		5.8			265
0.1	1	RT	03/01/00	0030		5.2			645
0.1	1	RT	03/01/00	0530		13.0			350
0.1	1	RT	03/06/00			8.8		1	4030
0.1	1	RT	03/07/00	0940	9:40 AM	3.2			445
0.1	1	RT	03/07/00	1128	11:28 AM	3.8			295
0.1	1	RT	03/07/00	1345	1:45 PM			5	
0.1	1	RT	03/07/00	1520	3:20 PM	3.0			350
0.1	1	RT	03/07/00	1630	4:30 PM	9.0			75
0.1	1	RT	03/07/00	1735	5:35 PM	1.8			500
0.1	1	RT	03/07/00	2305	11:05 PM	14.8			220
0.1	1	RT	03/08/00	0225	2:25 AM	11.2			250
0.1	1	RT	03/08/00	0505	5:05 AM	6.2			400
0.1	1	RT	03/08/00	0745	7:45 AM	7.0			295
0.1	1	RT	03/08/00			21.2		1	2690
0.1	1	RT	03/20/00			5.5		1	4455
0.1	3	NR	03/01/00	1445		14.0			285
0.1	3	NR	03/01/00	1830		17.1			160
0.1	3	NR	03/01/00	2210		25.7			190
0.1	3	NR	03/02/00	0640		48.1			245
0.1	3	NR	03/07/00	1512		33.5			275
0.1	3	NR	03/07/00	1925		30.7			130
0.1	3	NR	03/07/00	2315		45.5			160
0.1	3	NR	03/08/00	0030		72.0			60

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.1	3	NR	03/08/00	0642		45.3			265
0.1	3	NR	03/08/00	1025		13.0			515
0.1	3	NR	03/08/00	1415		15.4			390
0.1	3	NR	03/08/00	1815		5.4			610
0.1	3	NR	03/08/00	2315		8.7			760
0.1	3	NR	03/09/00	0645		50.2			375
0.1	3	NR	03/14/00	1205		11.5			490
0.1	3	NR	03/14/00	1620		27.1			200
0.1	3	NR	03/14/00	2005		15.8			330
0.1	3	NR	03/14/00	2305		9.2			350
0.1	3	NR	03/15/00	0755		22.5			230
0.1	3	NR	03/20/00			50.0		1	1295
0.1	3	NR	03/21/00	1335		29.8			510
0.1	3	NR	03/21/00	1710		31.8			205
0.1	3	NR	03/21/00	2050		28.1			180
0.1	3	NR	03/21/00	2355		24.3			330
0.1	3	NR	03/22/00	0710		48.9			140
0.1	3	NR	03/22/00			15.8		1	1485
0.1	3	NR	04/03/00			15.8		1	1195
0.1	4	KN	03/08/00	1155		78.0			165
0.1	4	KN	03/08/00	1410		17.2			315
0.1	4	KN	03/08/00	1710		34.1			180
0.1	4	KN	03/08/00	2215		65.0			175
0.1	4	KN	03/09/00	0610		60.5			245
0.1	4	KN	03/09/00	0800		82.0			39
0.1	4	KN	03/14/00	0922		21.3			305
0.1	4	KN	03/14/00	1120		19.2			322
0.1	4	KN	03/14/00	1440		31.1			265
0.1	4	KN	03/14/00	1740		21.1			295
0.1	4	KN	03/14/00	1950		11.0			357
0.1	4	KN	03/14/00	2155		6.7			243
0.1	4	KN	03/14/00	2305		9.6			126
0.1	4	KN	03/15/00	0555		10.8			503
0.1	4	KN	03/15/00	0805		30.5			110
0.1	4	KN	03/15/00	1040	10:40 AM	22.0			231
0.1	4	KN	03/15/00	1345	1:45 PM	23.5			265
0.1	4	KN	03/15/00	1615	4:15 PM	23.7			315
0.1	4	KN	03/15/00	1805	6:05 PM	16.3			278
0.1	4	KN	03/15/00	2305	11:05 PM	54.8			115
0.1	4	KN	03/16/00	0555	5:55 AM	30.2			277
0.1	4	KN	03/16/00	0805	8:05 AM	33.4			130
0.1	4	KN	03/21/00	0950	9:50 AM	23.5			240
0.1	4	KN	03/21/00	1230	12:30 PM	24.0			275
0.1	4	KN	03/21/00	1555	3:55 PM	27.4			270
0.1	4	KN	03/21/00	1950	7:50 PM	29.2			215
0.1	4	KN	03/21/00	2210	10:10 PM	35.1			95
0.1	4	KN	03/22/00	0550	5:50 AM			5	
0.1	4	KN	03/22/00	0800	8:00 AM	37.8			275
0.1	4	KN	03/27/00			23.5		1	1530
0.1	4	KN	03/28/00	1127	11:27 AM	25.9			318

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.1	4	KN	03/28/00	1520	3:20 PM	25.0			290
0.1	4	KN	03/28/00	1622	4:22 PM	11.3			170
0.1	4	KN	03/28/00	1728	5:28 PM	7.0			262
0.1	4	KN	03/28/00	2025	8:25 PM	16.2			292
0.1	4	KN	03/28/00	2210	10:10 PM	33.7			107
0.1	4	KN	03/29/00	0605	6:05 AM	37.5			308
0.1	4	KN	03/29/00	0810	8:10 AM	32.5			105
0.1	4	KN	03/29/00			27.8		1	1515
0.1	4	KN	04/10/00			21.8		1	1356
0.1	5	JF	03/15/00	0945		6.9			190
0.1	5	JF	03/15/00	1510		15.2			200
0.1	5	JF	03/15/00	2200		25.8		5	250
0.1	5	JF	03/16/00	0600		22.0		5	285
0.1	5	JF	03/21/00	1120		14.0			185
0.1	5	JF	03/21/00	1530		6.2			335
0.1	5	JF	03/21/00	1950		4.5			395
0.1	5	JF	03/21/00	2150		24.1			65
0.1	5	JF	03/22/00	0640		24.3			475
0.1	5	JF	03/22/00	1140		11.9			350
0.1	5	JF	03/22/00	1530		7.4			230
0.1	5	JF	03/22/00	2110		18.3			140
0.1	5	JF	03/23/00	0755		9.5			565
0.1	5	JF	03/28/00	1150		6.3			225
0.1	5	JF	03/28/00	1600		8.3			140
0.1	5	JF	03/28/00	2045		9.9			290
0.1	5	JF	03/28/00	2200		24.1			55
0.1	5	JF	03/29/00	0830		14.7			945
0.1	5	JF	04/03/00			9.5		1	1400
0.1	5	JF	04/04/00	1300		13.1			160
0.1	5	JF	04/04/00	1620		24.0			80
0.1	5	JF	04/04/00	2015		25.2			145
0.1	5	JF	04/04/00	2220		20.6			85
0.1	5	JF	04/05/00	0815		12.9			430
0.1	5	JF	04/05/00			10.6		1	890
0.1	5	JF	04/17/00			13.6		1	2180
0.1	6	RB1	03/22/00	0800	8:00 AM			3	0
0.1	6	RB1	03/22/00	1200	12:00 PM	68.0		3	370
0.1	6	RB1	03/22/00	1600	4:00 PM	15.6		3	170
0.1	6	RB1	03/22/00	2000	8:00 PM	15.1		3	570
0.1	6	RB1	03/22/00	2300	11:00 PM	38.9		4	305
0.1	6	RB1	03/28/00	0800	8:00 AM	23.0		3	530
0.1	6	RB1	03/28/00	1200	12:00 PM	26.6		3	340
0.1	6	RB1	03/28/00	1600	4:00 PM	13.4		3	700
0.1	6	RB1	03/28/00	2000	8:00 PM	27.8		3	205
0.1	6	RB1	03/28/00	2300	11:00 PM	53.1		4	325
0.1	6	RB1	03/29/00	0800	8:00 AM	21.1		3	305
0.1	6	RB1	03/29/00	1200	12:00 PM	20.6		3	505
0.1	6	RB1	03/29/00	1600	4:00 PM	24.7		3	210
0.1	6	RB1	03/29/00	2000	8:00 PM	18.5		3	400
0.1	6	RB1	03/29/00	2300	11:00 PM	24.1		4	350

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.1	6	RB1	04/04/00	0800	8:00 AM	25.9		3	575
0.1	6	RB1	04/04/00	1200	12:00 PM	31.2		3	375
0.1	6	RB1	04/04/00	1600	4:00 PM	16.1		3	250
0.1	6	RB1	04/04/00	2000	8:00 PM	42.1		3	125
0.1	6	RB1	04/04/00	2300	11:00 PM	63.1		4	225
0.1	6	RB1	04/10/00			38.1		1	1070
0.1	6	RB1	04/11/00	0800	8:00 AM	59.3		3	275
0.1	6	RB1	04/11/00	1200	12:00 PM	18.0		3	200
0.1	6	RB1	04/11/00	1600	4:00 PM	28.3		3	500
0.1	6	RB1	04/11/00	2000	8:00 PM	16.2		3	1750
0.1	6	RB1	04/11/00	2300	11:00 PM	4.4		4	575
0.1	6	RB1	04/12/00			42.2		1	1095
0.1	6	RB1	04/24/00			70.1		1	1000
0.1	7	AH	03/29/00	0800	8:00 AM	2.4		3	550
0.1	7	AH	03/29/00	1200	12:00 PM	1.6		3	295
0.1	7	AH	03/29/00	1600	4:00 PM	0.7		3	400
0.1	7	AH	03/29/00	2000	8:00 PM	18.2		3	90
0.1	7	AH	03/29/00	2300	11:00 PM	7.4		4	700
0.1	7	AH	04/04/00	0800	8:00 AM	1.7		3	605
0.1	7	AH	04/04/00	1200	12:00 PM	2.0		3	425
0.1	7	AH	04/04/00	1600	4:00 PM	2.6		3	415
0.1	7	AH	04/04/00	2000	8:00 PM	6.7		3	175
0.1	7	AH	04/04/00	2300	11:00 PM	5.9		4	550
0.1	7	AH	04/05/00	0800	8:00 AM	2.7		3	415
0.1	7	AH	04/05/00	1200	12:00 PM	1.3		3	1230
0.1	7	AH	04/05/00	1600	4:00 PM	5.0		3	275
0.1	7	AH	04/05/00	2000	8:00 PM	11.9		3	75.
0.1	7	AH	04/05/00	2300	11:00 PM	8.1		4	425
0.1	7	AH	04/11/00	0800	8:00 AM	3.4		3	335
0.1	7	AH	04/11/00	1200	12:00 PM	2.0		3	715
0.1	7	AH	04/11/00	1600	4:00 PM	2.7		3	630
0.1	7	AH	04/11/00	2000	8:00 PM	6.7		3	320
0.1	7	AH	04/11/00	2300	11:00 PM	5.7		4	550
0.1	7	AH	04/17/00			5.2		1	1790
0.1	7	AH	04/18/00	0800	8:00 AM	9.1		3	500
0.1	7	AH	04/18/00	1200	12:00 PM	18.4		3	180
0.1	7	AH	04/18/00	1600	4:00 PM	12.5		3	235
0.1	7	AH	04/18/00	2000	8:00 PM	3.2		3	350
0.1	7	AH	04/19/00	2300	11:00 PM	3.2		4	655
0.1	7	AH	04/19/00			7.8		1	1730
0.1	8	SG	04/05/00	0800	8:00 AM	32.0	47.9	3	280
0.1	8	SG	04/05/00	1200	12:00 PM	25.3		3	470
0.1	8	SG	04/05/00	1600	4:00 PM	13.4		3	555
0.1	8	SG	04/05/00	2000	8:00 PM	19.2		3	390
0.1	8	SG	04/06/00	0100	1:00 AM	19.7		4	485
0.1	8	SG	04/11/00	0800	8:00 AM	41.5		3	265
0.1	8	SG	04/11/00	1200	12:00 PM	90.6		3	185
0.1	8	SG	04/11/00	1600	4:00 PM	83.0		3	225
0.1	8	SG	04/11/00	2000	8:00 PM	74.2		3	180

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.1	8	SG	04/12/00	0100	1:00 AM	41.9		4	485
0.1	8	SG	04/12/00	0800	8:00 AM	29.9		3	305
0.1	8	SG	04/12/00	1200	12:00 PM	13.4		3	800
0.1	8	SG	04/12/00	1600	4:00 PM	7.6		3	1115
0.1	8	SG	04/12/00	2000	8:00 PM	19.9		3	415
0.1	8	SG	04/13/00	0100	1:00 AM	24.4		4	550
0.1	8	SG	04/18/00	0800	8:00 AM	40.2		3	200
0.1	8	SG	04/18/00	1200	12:00 PM	19.4		3	440
0.1	8	SG	04/18/00	1600	4:00 PM	19.4		3	327
0.1	8	SG	04/18/00	2000	8:00 PM	36.0		3	155
0.1	8	SG	04/19/00	0100	1:00 AM	26.2		4	320
0.1	8	SG	04/24/00			16.4		1	3325
0.1	8	SG	04/25/00	0800	8:00 AM	32.0		3	440
0.1	8	SG	04/25/00	1200	12:00 PM	15.2		3	620
0.1	8	SG	04/25/00	1600	4:00 PM	12.4		3	400
0.1	8	SG	04/25/00	2000	8:00 PM	16.7		3	595
0.1	8	SG	04/26/00	0100	1:00 AM	29.2		4	495
0.1	8	SG	04/26/00			14.8		1	3135
0.1	8	SG	05/08/00			17.0		1	3275
0.1	9	AB2	04/12/00	0800	8:00 AM			3	0
0.1	9	AB2	04/12/00	1200	12:00 PM	24.1		3	273
0.1	9	AB2	04/12/00	1600	4:00 PM	14.1		3	150
0.1	9	AB2	04/12/00	2000	8:00 PM	13.2		3	115
0.1	9	AB2	04/12/00	2300	11:00 PM	22.9		4	180
0.1	9	AB2	04/18/00	0800	8:00 AM	25.6		3	319
0.1	9	AB2	04/18/00	1200	12:00 PM	17.2		3	184
0.1	9	AB2	04/18/00	1600	4:00 PM	18.2		3	170
0.1	9	AB2	04/18/00	2000	8:00 PM	16.5		3	194
0.1	9	AB2	04/19/00	0000	12:00 AM			3	0
0.1	9	AB2	04/19/00	0800	8:00 AM	22.9		3	296
0.1	9	AB2	04/19/00	1200	12:00 PM	7.7		3	510
0.1	9	AB2	04/19/00	1600	4:00 PM	6.7		3	688
0.1	9	AB2	04/19/00	2000	8:00 PM	6.2		4	1185
0.1	9	AB2	04/25/00	0800	8:00 AM	17.4		3	333
0.1	9	AB2	04/25/00	1200	12:00 PM	10.1		3	250
0.1	9	AB2	04/25/00	1600	4:00 PM	7.6		3	270
0.1	9	AB2	04/25/00	1840	6:40 PM			5	
0.1	9	AB2	04/25/00	2000	8:00 PM			3	0
0.1	9	AB2	04/25/00	2130	9:30 PM			5	
0.1	9	AB2	04/26/00	0000	12:00 AM	14.0		4	105
0.1	9	AB2	05/02/00			8.5		1,6	1246
0.1	9	AB2	05/03/00	0800	8:00 AM	10.3		3,6	555
0.1	9	AB2	05/03/00	1200	12:00 PM	2.2		3,6	856
0.1	9	AB2	05/03/00	1600	4:00 PM	6.2		3,6	314
0.1	9	AB2	05/03/00	2000	8:00 PM	6.3		3,6	316
0.1	9	AB2	05/04/00	0000	12:00 AM	5.8		4,6	416
0.1	9	AB2	05/04/00			11.0		1,6	1252
0.1	9	AB2	05/16/00			16.3		1,6,10	1374
0.1	11	VM	04/26/00			13.2		1	1690
0.1	11	VM	05/15/00			17.4		1	1805

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)	
0.1	12	SD1	05/03/00			19.1		1	2170	
0.1	12	SD1	05/22/00			24.0		1	1080	
0.02	1	SV	02/16/00	1335		24.5			235	
0.02	1	SV	02/16/00	1820		19.0			170	
0.02	1	SV	02/16/00	2105		13.0			140	
0.02	1	SV	02/17/00	0150		12.0			195	
0.02	1	SV	02/17/00	0510		8.5			275	
0.02	1	SV	02/22/00	0755		35.0			32	
0.02	1	SV	02/22/00	1510		23.0			210	
0.02	1	SV	02/22/00	1955		23.5			180	
0.02	1	SV	02/22/00	2315		14.0			190	
0.02	1	SV	02/23/00	0424		15.5			220	
0.02	1	SV	02/23/00	0535		9.5			70	
0.02	1	SV	02/23/00	0635		14.0			37	
0.02	1	SV	02/23/00	0810		4.0			330	
0.02	1	SV	02/23/00	1010		5.0			310	
0.02	1	SV	02/23/00	1450		12.0			270	
0.02	1	SV	02/23/00	1730		7.0			215	
0.02	1	SV	02/23/00	1940		10.0			115	
0.02	1	SV	02/23/00	2145		5.0			280	
0.02	1	SV	02/24/00	0421		10.0			390	
0.02	1	SV	02/24/00	0605		5.5			185	
0.02	1	SV	02/24/00	0815		7.0			195	
0.02	1	SV	02/29/00	0810		20.0			70	
0.02	1	SV	02/29/00	1210		13.0			225	
0.02	1	SV	02/29/00	1615		18.0			110	
0.02	1	SV	02/29/00	2225		19.5			205	
0.02	1	SV	03/01/00	0245		25.5			145	
0.02	1	SV	03/01/00	0615		18.0			125	
0.02	1	SV	03/01/00	0805		28.0			42	
0.02	1	SV	03/07/00			27.5		1,6	870	
0.02	1	SV	03/08/00	1015		32.0		6	105	
0.02	1	SV	03/08/00	1510		46.0		6	140	
0.02	1	SV	03/08/00	2005		43.0		6	135	
0.02	1	SV	03/08/00	2130		43.0		6	45	
0.02	1	SV	03/09/00	0515		27.5		6	340	
0.02	1	SV	03/09/00			27.5		1,6	685	
0.02	1	SV	03/21/00			47.0		1,6	715	
0.02	2	CB	02/23/00	1030		5.0			200	
0.02	2	CB	02/23/00	1100		3.1			200	
0.02	2	CB	02/23/00	1205		5.2			180	
0.02	2	CB	02/23/00	1345		5.2			305	
0.02	2	CB	02/23/00	1552		7.5			265	
0.02	2	CB	02/23/00	1620		2.4			195	
0.02	2	CB	02/23/00	1825		14.8			120	
0.02	2	CB	02/23/00	1925		5.2			205	
0.02	2	CB	02/23/00	1950		1.9			225	
0.02	2	CB	02/23/00	2250				5	175	
0.02	2	CB	02/24/00	0115		44.0			150	
0.02	2	CB	02/24/00	0630		29.8			290	

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.02	2	CB	02/24/00	0725		34.0			65
0.02	2	CB	02/29/00	0930				5	105
0.02	2	CB	02/29/00	1225		16.8			200
0.02	2	CB	02/29/00	1250		2.8		8	310
0.02	2	CB	02/29/00	1340		5.5			250
0.02	2	CB	02/29/00	1520		7.4			210
0.02	2	CB	02/29/00	1720		9.5			170
0.02	2	CB	02/29/00	1830		11.0			125
0.02	2	CB	02/29/00	2205		22.8		8	150
0.02	2	CB	02/29/00	2320		21.0		8	70
0.02	2	CB	03/01/00	0310		4.8		8	340
0.02	2	CB	03/01/00	0620		8.8		8	300
0.02	2	CB	03/01/00	0745		5.5		8	160
0.02	2	CB	03/01/00	0855		3.8			165
0.02	2	CB	03/01/00	1030		5.5			430
0.02	2	CB	03/01/00	1030		5.2			430
0.02	2	CB	03/01/00	1153		16.0			250
0.02	2	CB	03/01/00	1525		39.0			170
0.02	2	CB	03/01/00	1645		15.8			130
0.02	2	CB	03/01/00	1800		6.8			220
0.02	2	CB	03/01/00	1840		16.8		8	50
0.02	2	CB	03/01/00	2110		21.5		8	120
0.02	2	CB	03/01/00	2225		22.0		8	55
0.02	2	CB	03/01/00	2300		3.8		8	220
0.02	2	CB	03/02/00	0300		4.5		8	1120
0.02	2	CB	03/07/00	0940	9:40 AM	19.8			95
0.02	2	CB	03/07/00	1240	12:40 PM	38.0			115
0.02	2	CB	03/07/00	1500	3:00 PM	20.3			180
0.02	2	CB	03/07/00	1620	4:20 PM	6.2			265
0.02	2	CB	03/07/00	1730	5:30 PM	6.0			235
0.02	2	CB	03/07/00	1935	7:35 PM	6.0			290
0.02	2	CB	03/07/00	2205	10:05 PM	12.0			200
0.02	2	CB	03/07/00	2310	11:10PM	4.0			200
0.02	2	CB	03/08/00	0030	12:30 AM	9.2			120
0.02	2	CB	03/08/00	0600	6:00 AM	9.8			455
0.02	2	CB	03/08/00	0645	6:45 AM	12.5			80
0.02	2	CB	03/13/00			14.8		1	1375
0.02	2	CB	03/14/00	1135	11:35 AM	15.5			155
0.02	2	CB	03/14/00	1700	5:00 PM	36.0			295
0.02	2	CB	03/14/00	1825	6:25 PM	21.2		8	100
0.02	2	CB	03/14/00	2205	10:05 PM	19.8		8	220
0.02	2	CB	03/14/00	2300	11:00 PM	5.5		8	80
0.02	2	CB	03/14/00	2320	11:20 PM	1.4		8	150
0.02	2	CB	03/14/00	2335	11:35 PM	2.4		8	100
0.02	2	CB	03/15/00	0600	6:00 AM	18.5		8	250
0.02	2	CB	03/15/00			14.8		1	1555
0.02	2	CB	03/16/00			11.5		7	
0.02	2	CB	03/27/00			14.5		1	1600
0.02	3	QY	03/01/00	0040		7.9	7.5	9	180
0.02	3	QY	03/01/00	0910		3.6		9	210

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.02	3	QY	03/01/00	0930		0.9		9	230
0.02	3	QY	03/01/00	1040		2.5		9	300
0.02	3	QY	03/01/00	1700		9.1	28.5	9	100
0.02	3	QY	03/01/00	2100		5.9		9	200
0.02	3	QY	03/01/00	2310		3.8		9	130
0.02	3	QY	03/02/00	0640		7.4		9	350
0.02	3	QY	03/07/00	0815		4.2		9	250
0.02	3	QY	03/07/00	0845		1.2		9	325
0.02	3	QY	03/07/00	0915		1.5		9	300
0.02	3	QY	03/07/00	1100		5.0		9	200
0.02	3	QY	03/07/00	1300		16.9		9	110
0.02	3	QY	03/07/00	1540		30.4		9	175
0.02	3	QY	03/07/00	1820		30.0		9	170
0.02	3	QY	03/07/00	2300		49.9		9	120
0.02	3	QY	03/08/00	0630		19.1		9	670
0.02	3	QY	03/08/00	0830		11.4		9	170
0.02	3	QY	03/08/00	0940		7.8		9	170
0.02	3	QY	03/08/00	1145		9.7		9	180
0.02	3	QY	03/08/00	1355		6.3		9	550
0.02	3	QY	03/08/00	1715		11.9		9	210
0.02	3	QY	03/08/00	2100		12.8		9	150
0.02	3	QY	03/09/00	0200		6.3		9	425
0.02	3	QY	03/09/00	0640		6.5		9	425
0.02	3	QY	03/14/00	0920		5.5			270
0.02	3	QY	03/14/00	1330		6.7			195
0.02	3	QY	03/14/00	1730		8.0			185
0.02	3	QY	03/14/00	2040		13.6			185
0.02	3	QY	03/14/00	2300		24.0			280
0.02	3	QY	03/15/00	0140		13.9			425
0.02	3	QY	03/15/00	0645		42.5			232
0.02	3	QY	03/15/00	0750		45.5			85
0.02	3	QY	03/20/00			4.8		1	2092
0.02	3	QY	03/21/00	0830	8:30 AM	7.0			105
0.02	3	QY	03/21/00	0945	9:45 AM	3.6			166
0.02	3	QY	03/21/00	1130	11:30 AM	3.7			180
0.02	3	QY	03/21/00	1500	3:00 PM	8.9			162
0.02	3	QY	03/21/00	1955	7:55 PM	9.6			185
0.02	3	QY	03/21/00	2215	10:15 PM	7.7			170
0.02	3	QY	03/22/00	0610	6:10 AM	14.8			445
0.02	3	QY	03/22/00			9.6		1	1707
0.02	3	QY	04/03/00			15.9		1,10	1867
0.02	4	DH	03/08/00	1100		18.3			225
0.02	4	DH	03/08/00	1300		16.1			205
0.02	4	DH	03/08/00	1500		16.1			150
0.02	4	DH	03/08/00	1640		13.9			150
0.02	4	DH	03/08/00	1900		10.2			175
0.02	4	DH	03/08/00	2110		13.4			130
0.02	4	DH	03/09/00	0230		12.9			260
0.02	4	DH	03/09/00	0630		10.4			250
0.02	4	DH	03/09/00	0800		11.9			115

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.02	4	DH	03/14/00	1030		37.8			165
0.02	4	DH	03/14/00	1310		29.8			115
0.02	4	DH	03/14/00	1540		27.1			130
0.02	4	DH	03/14/00	1740		23.0			178
0.02	4	DH	03/14/00	2100		20.0			175
0.02	4	DH	03/15/00	0120		11.8			290
0.02	4	DH	03/15/00	0345		10.3			345
0.02	4	DH	03/15/00	0640		8.4			350
0.02	4	DH	03/15/00	0730		9.4			140
0.02	4	DH	03/15/00	0855		10.1			205
0.02	4	DH	03/15/00	1030		17.0			245
0.02	4	DH	03/15/00	1255		17.9			170
0.02	4	DH	03/15/00	1545		17.2			260
0.02	4	DH	03/15/00	1720		16.5			140
0.02	4	DH	03/15/00	2145		11.3			175
0.02	4	DH	03/16/00	0425		21.9			265
0.02	4	DH	03/16/00	0715		14.0			180
0.02	4	DH	03/16/00	0800		15.8			40
0.02	4	DH	03/21/00	1020		21.7			165
0.02	4	DH	03/21/00	1135		13.3			170
0.02	4	DH	03/21/00	1230		11.0			135
0.02	4	DH	03/21/00	1505		15.6			175
0.02	4	DH	03/21/00	1640		15.8			130
0.02	4	DH	03/21/00	1800		7.4			200
0.02	4	DH	03/21/00	2128		12.5			175
0.02	4	DH	03/22/00	0147		14.1			285
0.02	4	DH	03/22/00	0700		12.3			310
0.02	4	DH	03/22/00	0800		14.3			80
0.02	4	DH	03/27/00			13.4		1	2320
0.02	4	DH	03/28/00	1105	11:05 AM	24.5			175
0.02	4	DH	03/28/00	1235	12:35 PM	20.9			170
0.02	4	DH	03/28/00	1430	2:30 PM	20.7			145
0.02	4	DH	03/28/00	1545	3:45 PM	21.9			175
0.02	4	DH	03/28/00	1746	5:46 PM	19.9			170
0.02	4	DH	03/28/00	1844	6:44 PM	13.8			130
0.02	4	DH	03/28/00	2050	8:50 PM			5	
0.02	4	DH	03/28/00	2236	10:36 PM	16.3			170
0.02	4	DH	03/29/00	0347	3:47 AM	14.3			340
0.02	4	DH	03/29/00	0655	6:55 AM	14.1			225
0.02	4	DH	03/29/00			18.0		1	1425
0.02	4	DH	04/10/00			22.3		1	1395
0.02	5	JS2	03/15/00	1035		14.9			340
0.02	5	JS2	03/15/00	1430		20.8			360
0.02	5	JS2	03/15/00	1840		15.2			320
0.02	5	JS2	03/15/00	2130		13.3			215
0.02	5	JS2	03/16/00	0000		10.9			245
0.02	5	JS2	03/16/00	0610		14.4			395
0.02	5	JS2	03/21/00	0800	8:00 AM	8.5		3	615
0.02	5	JS2	03/21/00	1200	12:00 PM	8.0		3	975
0.02	5	JS2	03/21/00	1600	4:00 PM	11.7		3	405

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.02	5	JS2	03/21/00	2000	8:00 PM	14.4		3	220
0.02	5	JS2	03/21/00	2300	11:00 PM	13.6		4	450
0.02	5	JS2	03/22/00	0800	8:00 AM	3.1		3	985
0.02	5	JS2	03/22/00	1200	12:00 PM	11.8		3	655
0.02	5	JS2	03/22/00	1600	4:00 PM	10.5		3	460
0.02	5	JS2	03/22/00	2000	8:00 PM	12.3		3	260
0.02	5	JS2	03/22/00	2300	11:00 PM	14.4		4	680
0.02	5	JS2	03/28/00	0800	8:00 AM	7.2		3	760
0.02	5	JS2	03/28/00	1200	12:00 PM	10.6		3	645
0.02	5	JS2	03/28/00	1600	4:00 PM	11.5		3	505
0.02	5	JS2	03/28/00	2000	8:00 PM	14.3		3	235
0.02	5	JS2	03/29/00	0000	12:00 AM	10.0		4	540
0.02	5	JS2	04/03/00			6.4		1	2665
0.02	5	JS2	04/04/00	0800	8:00 AM	2.2		3	1270
0.02	5	JS2	04/04/00	1200	12:00 PM	3.2		3	645
0.02	5	JS2	04/04/00	1600	4:00 PM	5.7		3	645
0.02	5	JS2	04/04/00	2000	8:00 PM	2.8		3	915
0.02	5	JS2	04/05/00	0000	12:00 AM	9.3		4	730
0.02	5	JS2	04/05/00			7.6		1	2420
0.02	5	JS2	04/17/00			12.7		1	2225
0.02	6	SK	03/22/00	0600	6:00 AM	3.9		3	920
0.02	6	SK	03/22/00	1000	10:00 AM	7.2		3	1010
0.02	6	SK	03/22/00	1400	2:00 PM	3.9		3	1320
0.02	6	SK	03/22/00	1800	6:00 PM	17.6		3	400
0.02	6	SK	03/22/00	2300	11:00 PM	10.5		4	830
0.02	6	SK	03/28/00	0800	8:00 AM	2.9		3	910
0.02	6	SK	03/28/00	1200	12:00 PM	4.5		3	520
0.02	6	SK	03/28/00	1600	4:00 PM	4.6		3	500
0.02	6	SK	03/28/00	2000	8:00 PM	7.0		3	60
0.02	6	SK	03/28/00	2300	11:00 PM	19.6		4	1040
0.02	6	SK	03/29/00	0800	8:00 AM	4.4		3	1100
0.02	6	SK	03/29/00	1200	12:00 PM	9.7		3	230
0.02	6	SK	03/29/00	1600	4:00 PM	3.5		3	520
0.02	6	SK	03/29/00	2000	8:00 PM	7.9		3	150
0.02	6	SK	03/29/00	2300	11:00 PM	4.1		4	940
0.02	6	SK	04/04/00	0800	8:00 AM	3.9		3	790
0.02	6	SK	04/04/00	1200	12:00 PM	5.7		3	880
0.02	6	SK	04/04/00	1600	4:00 PM	13.9		3	310
0.02	6	SK	04/04/00	2000	8:00 PM	9.4		3	150
0.02	6	SK	04/04/00	2300	11:00 PM	7.9		4	1020
0.02	6	SK	04/10/00			7.4		1	3000
0.02	6	SK	04/11/00	0800	8:00 AM	5.4		3	630
0.02	6	SK	04/11/00	1200	12:00 PM	6.2		3	530
0.02	6	SK	04/11/00	1600	4:00 PM	15.5		3	240
0.02	6	SK	04/11/00	2000	8:00 PM	19.7		3	80
0.02	6	SK	04/11/00	2300	11:00 PM	11.0		4	640
0.02	6	SK	04/12/00			5.2		1	2500
0.02	6	SK	04/24/00			4.9		1	2510
0.02	8	DC	04/05/00	0800	8:00 AM	6.0		3	1500
0.02	8	DC	04/05/00	1200	12:00 PM	4.7		3	500

## Att5- Pino Urine Iodine Results 2001-04-231.xls

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.02	8	DC	04/05/00	1600	4:00 PM	3.4		3	500
0.02	8	DC	04/05/00	2000	8:00 PM	21.2		3	100
0.02	8	DC	04/05/00	2250	10:30 PM	12.4		4	600
0.02	8	DC	04/11/00	0800	8:00 AM	6.5		3	700
0.02	8	DC	04/11/00	1200	12:00 PM	4.2		3	1200
0.02	8	DC	04/11/00	1600	4:00 PM	4.9		3	825
0.02	8	DC	04/11/00	2000	8:00 PM	23.7		3	175
0.02	8	DC	04/11/00	2200	10:00 PM	27.8		4	550
0.02	8	DC	04/12/00	0800	8:00 AM	10.6		3	825
0.02	8	DC	04/12/00	1200	12:00 PM	7.9		3	700
0.02	8	DC	04/12/00	1600	4:00 PM			3	0
0.02	8	DC	04/12/00	2000	8:00 PM	33.5		3	125
0.02	8	DC	04/12/00	2250	10:30 PM	28.4		4	550
0.02	8	DC	04/18/00	0800	8:00 AM	31.0		3	850
0.02	8	DC	04/18/00	1200	12:00 PM	19.1		3	700
0.02	8	DC	04/18/00	1600	4:00 PM	12.9		3	300
0.02	8	DC	04/18/00	2000	8:00 PM	9.8		3	250
0.02	8	DC	04/18/00	2300	11:00 PM	13.4		4	750
0.02	8	DC	04/24/00			6.8		1	3535
0.02	8	DC	04/25/00	0800	8:00 AM	14.1		3	775
0.02	8	DC	04/25/00	1200	12:00 PM	3.8		3	1700
0.02	8	DC	04/25/00	1600	4:00 PM	6.8		3	600
0.02	8	DC	04/25/00	2000	8:00 PM			3	0
0.02	8	DC	04/25/00	2300	11:00 PM	23.4		3	425
0.02	8	DC	04/26/00			14.2		1	2905
0.02	8	DC	05/08/00			12.3		1	1365
0.02	9	GB	04/12/00	0800	8:00 AM	61.2		3	260
0.02	9	GB	04/12/00	1200	12:00 PM	31.1		3	250
0.02	9	GB	04/12/00	1600	4:00 PM	24.0		3	825
0.02	9	GB	04/12/00	2000	8:00 PM	6.6		3	2025
0.02	9	GB	04/12/00	2300	11:00 PM	8.5		4	1425
0.02	9	GB	04/18/00	0800	8:00 AM	15.9		3	390
0.02	9	GB	04/18/00	1200	12:00 PM	15.4		3	155
0.02	9	GB	04/18/00	1600	4:00 PM			3	0
0.02	9	GB	04/18/00	2000	8:00 PM	8.7		3	1025
0.02	9	GB	04/18/00	2335	11:35 PM	22.1		4	745
0.02	9	GB	04/19/00	0800	8:00 AM	80.4		3	255
0.02	9	GB	04/19/00	1200	12:00 PM	90.5		3	215
0.02	9	GB	04/19/00	1600	4:00 PM	21.6		3	900
0.02	9	GB	04/19/00	2000	8:00 PM	14.0		3	1580
0.02	9	GB	04/19/00	2250	10:50 PM	23.9		4	1055
0.02	9	GB	04/25/00	0800	8:00 AM	6.9		3	600
0.02	9	GB	04/25/00	1200	12:00 PM	11.4		3	330
0.02	9	GB	04/25/00	1550	3:50 PM			5	
0.02	9	GB	04/25/00	1600	4:00 PM	6.4		3	1040
0.02	9	GB	04/25/00	2000	8:00 PM	6.4		3	2180
0.02	9	GB	04/26/00	0025	12:25 AM	6.0		4	1170
0.02	9	GB	05/02/00			12.3		1	4985
0.02	9	GB	05/03/00	0800	8:00 AM	22.7		3	325
0.02	9	GB	05/03/00	1200	12:00 PM			3	0

Dose	Set	Subject	Date	Military	12-Hr	I-Corr. (mcg/dl)	I-Uncorr. (mcg/dl)	Notes	Vol (ml)
0.02	9	GB	05/03/00	1600	4:00 PM	21.3		3	825
0.02	9	GB	05/03/00	2000	8:00 PM	6.4		3	1625
0.02	9	GB	05/03/00	2330	11:30 PM	10.4		4	1075
0.02	9	GB	05/04/00			9.2		1	5265
0.02	9	GB	05/16/00			5.6		1	5450
0.02	11	GH	04/26/00			40.7		1	1480
0.02	11	GH	05/15/00			14.7		1	1740
0.02	13	SD2	05/10/00			16.8		1	1920
0.02	13	SD2	05/30/00			14.5		1	1523
0.007	9	RB2	04/12/00			24.2		1	2380
0.007	9	RB2	05/01/00			10.2		1	2540
0.007	10	MJ	04/19/00			37.2		1	1450
0.007	10	MJ	05/08/00			19.3		1	1640
0.007	10	PE	04/19/00			27.0		1	1250
0.007	10	PE	05/08/00			20.1		1	1285
0.007	10	SE	04/19/00			9.9		1	2335
0.007	10	SE	05/08/00			8.6		1	3280
0.007	12	EA	05/03/00			10.7		1	1550
0.007	12	EA	05/22/00			10.8		1	1960
0.007	13	LB	05/10/00			4.3		1	1670
0.007	13	LB	05/30/00			4.9		1	2470
0.007	13	LR	05/10/00			13.4		1	2320
0.007	13	LR	05/30/00			6.1		1	2050
<b>Urine Data Notes</b>									
General note: Sampling times entered originally as 12-hour times have been entered also as military times.									
1	24-hr collection. Date shown is the <b>beginning</b> collection date.								
2	Two urine samples for DR could not be analyzed because labels came off sample vials during shipment.								
	Three additional samples logged by the OHSU CRC were not found in the shipping box.								
3	Pooled collection. Time shown is the <b>beginning</b> of 4-hour collection or the collection that ends at bedtime.								
4	Pooled overnight collection. Date and time shown are the <b>beginning</b> of overnight collection.								
5	Missed collection.								
6	Set 9 (subjects AB2, GB, & RB2) were exposed for 15 days instead of 14 because the I-123 did not arrive on time on ED14 and therefore the RAIU scheduled for ED14 took place on ED15 instead. Subject SV also was exposed for 15 days because she was out of town on ED14 and likewise the RAIU scheduled for ED14 took place on ED15. For these 4 subjects, one urine collection was missed (Exp Day 14) and collection schedule was shifted up by 1 day.								
7	Sample excluded from protocol; analyzed for iodine in error.								
8	Entry not recorded in subject study log.								
9	Subject study log lost.								
10	One missed collection in 24-hr pool; missed sample volume estimated as average of sample volumes for that day.								
	Estimated volume for missed sample included in total volume of 24-hr pooled collection.								
11	Subject study log entry lacks volume of urine collection.								
Yellow highlight in the I-Corr. column indicates an iodine measurement corrected in the 4/23/01 version of the file.									
Iodine measurement as it appeared in the 11/29/00 version of the file is in red font in the I-Uncorr. column.									

**Attachment 6**

**Thyroid Function Data from Greer's Study**

Event:						EV1	EV1	EV2	EV2	EV3	EV3
Study Day:						PV		SD1		SD6	
Day Designation:							BV		E1		
Study Version	Subject ID	Medical Record #	Sex	Set/ Group	Dose	Blood/ Thy. func.	Result	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result
Main	AN	1500355	f	1	0.5	2/15/2000 11:40	1.3	2/17/2000 8:45	1.4	2/22/2000 12:10	1.3
Main	DR	1514852	m	2	0.5	2/22/2000 10:40	1.1	2/24/2000 8:30	1.1	2/29/2000 12:00	1.2
Main	JS1	1535381	m	3	0.5	2/24/2000 15:00	1.3	3/2/2000 8:15	1.1	3/7/2000 12:10	1.3
Main	CW	1435544	f	4	0.5	3/2/2000 12:15	1.1	3/9/2000 8:05	1.5	3/14/2000 12:10	1
Main	TO	1535981	m	5	0.5	2/28/2000 13:45		3/16/2000 8:07	1	3/21/2000 12:02	1.1
Main	MA	352747	m	6	0.5	2/18/2000 10:15	1.3	3/23/2000 9:08	1.3	3/28/2000 15:43	1.2
Main	AB1	1417419	f	7	0.5	3/17/2000 13:35	1	3/30/2000 8:05	1.1	4/4/2000 11:45	1.1
Main	RC	989288	f	8	0.5	3/31/2000 12:15	0.8	4/6/2000 8:00	0.8	4/11/2000 12:00	0.9
Uptake	BR	1390262	f	11	0.5	4/21/2000 14:30	1.2				
Uptake	NA	1111042	m	12	0.5	5/1/2000 14:25	1.1				
Main	RT	1406720	f-h	1	0.1	2/15/2000 11:30	1.3	2/17/2000 8:15	1.3	2/22/2000 11:50	1
Main	NR	1535899	m	3	0.1	2/28/2000 10:50	1.3	3/2/2000 8:00	1.4	3/7/2000 12:00	1.5
Main	KN	843833	m	4	0.1	3/2/2000 13:00	1.1	3/9/2000 8:20	1.4	3/14/2000 11:43	1.1
Main	JF	1192495	f	5	0.1	3/8/2000 14:55	1.4	3/16/2000 8:15	1	3/21/2000 11:52	1.2
Main	RB1	1539737	m	6	0.1	3/15/2000 13:30	1.3	3/23/2000 8:00	1.1	3/28/2000 12:10	1
Main	AH	1367467	f	7	0.1	3/24/2000 16:00	1	3/30/2000 8:10	1.1	4/4/2000 12:10	1.1
Main	SG	263627	f	8	0.1	3/31/2000 12:40	1.2	4/6/2000 8:15	1.1	4/11/2000 12:00	1.4
S. Main	AB2	1455926	m	9	0.1	4/4/2000 12:35	1	4/13/2000 8:10	1.1	4/18/2000 12:10	1.2
Uptake	VM	1546871	f-h	11	0.1	4/19/2000 14:35	1				
Uptake	SD1	1541591	m	12	0.1	5/1/2000 10:35	1.2				
S. Main	SV	501835	f-h	1	0.02	2/15/2000 11:35	1	2/17/2000 8:30	1	2/22/2000 11:55	1
Main	CB	1534738	f	2	0.02	2/23/2000 7:55	1	2/24/2000 9:08	1.1	2/29/2000 11:55	1.1
Main	QY	1153603	m	3	0.02	2/25/2000 13:40	1.2	3/2/2000 8:45	1.3	NT	
Main	DH	669695	m	4	0.02	3/2/2000 14:05	1.3	3/9/2000 8:45	1.2	3/14/2000 12:18	1.1
Main	JS2	1369111	m	5	0.02	2/24/2000 15:00	1.2	3/16/2000 8:05	1	3/21/2000 12:00	1.2
Main	SK	1467881	f	6	0.02	3/2/2000 11:50	1.1	3/23/2000 8:15	1.2	3/28/2000 15:47	1.1
Main	DC	1161402	f	8	0.02	3/30/2000 19:46	1.2	4/6/2000 8:10	1.2	4/11/2000 12:50	1.3
S. Main	GB	776140	m	9	0.02	4/10/2000 16:28	1	4/13/2000 8:15	1	4/18/2000 12:10	1
Uptake	GH	638333	f-h	11	0.02	4/21/2000 14:55	0.7				
Uptake	SD2	1523446	m	13	0.02	4/28/2000 11:45	0.4				
S. Uptake	RB2	842597	f	9	0.007	4/11/2000 15:30	1.1				
Uptake	MJ	213870	f	10	0.007	4/18/2000 16:50	1.2				
Uptake	PE	1547553	m	10	0.007	4/18/2000 13:40	1.1				
Uptake	SE	838272	f	10	0.007	4/18/2000 12:00	0.9				
Uptake	EA	921886	f	12	0.007	5/2/2000 12:30	1				
Uptake	LB	1083480	f-h	13	0.007	2/18/2000 14:40					
Uptake	IR	1144761	f	13	0.007	5/9/2000 15:40	0.9				

File: Att6-Thyroid Function Data 2001-02-02 5xFT4.xls

**Tab: FREE T4,SERUM**

					EV8	EV8	EV9	EV9	EV10	EV10	EV11	EV11
					SD8		SD9		SD9		SD13	
					E3		E4		E4		E8	
Subject ID	Medical Record #	Sex	Set/ Group	Dose	Blood-9a/ Thy. func.	Result	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result	Blood-9-11a/ Thy. func.	Result
AN	1500355	f	1	0.5	2/24/2000 9:10	1.3	2/25/2000 8:16	1.4	2/25/2000 13:14	1.5	2/29/2000 11:25	1.5
DR	1514852	m	2	0.5	3/2/2000 9:10	1.2	NT		3/3/2000 12:13	1.2	3/7/2000 9:10	1.1
JS1	1535381	m	3	0.5	3/9/2000 9:00	1.3	3/10/2000 7:55	1.2	3/10/2000 11:55	1.1	3/14/2000 9:20	1.2
CW	1435544	f	4	0.5	3/16/2000 9:00	1.2	3/17/2000 8:00	1.2	3/17/2000 12:05	1.1	3/21/2000 9:20	1.3
TO	1535981	m	5	0.5	3/23/2000 9:15	1.4	3/24/2000 8:10	1.3	3/24/2000 12:00	1.2	3/28/2000 9:50	1.4
MA	352747	m	6	0.5	3/30/2000 9:40	1.2	3/31/2000 7:50	1.3	3/31/2000 11:45	1.3	4/4/2000 10:55	1.2
AB1	1417419	f	7	0.5	4/6/2000 8:40	1.1	4/7/2000 8:15	1.1	4/7/2000 11:45	0.9	4/11/2000 8:15	1.5
RC	989288	f	8	0.5	4/13/2000 9:20	1	4/14/2000 8:00	0.8	4/14/2000 12:05	0.8	4/18/2000 10:40	1.2
BR	1390262	f	11	0.5								
NA	1111042	m	12	0.5								
RT	1406720	f-h	1	0.1	2/24/2000 8:00	1.2	2/25/2000 7:55	1.2	2/25/2000 12:05	1.1	2/29/2000 9:30	1.2
NR	1535899	m	3	0.1	3/9/2000 8:55	1.6	3/10/2000 7:59	1.4	3/10/2000 11:50	1.3	3/14/2000 10:50	1.3
KN	843833	m	4	0.1	3/16/2000 8:25	1.1	3/17/2000 8:00	1.1	3/17/2000 11:45	1	3/21/2000 8:25	1.3
JF	1192495	f	5	0.1	3/23/2000 8:45	1.3	3/24/2000 8:20	1.2	3/24/2000 11:40	1	3/28/2000 15:49	1.3
RBI	1539737	m	6	0.1	3/30/2000 9:15	1.3	3/31/2000 8:10	1.2	3/31/2000 12:05	1.1	4/4/2000 10:55	1.2
AH	1367467	f	7	0.1	4/6/2000 9:00	1	4/7/2000 8:00	1	4/7/2000 12:00	1.1	4/11/2000 9:00	1.2
SG	263627	f	8	0.1	4/13/2000 9:00	1.4	4/14/2000 8:25	1.2	4/14/2000 12:00	1.2	4/18/2000 9:50	1.4
AB2	1455926	m	9	0.1	4/20/2000 8:55	1.1	4/21/2000 7:45	1.2	4/21/2000 11:45	0.9	4/25/2000 9:10	1.3
VM	1546871	f-h	11	0.1								
SD1	1541591	m	12	0.1								
SV	501835	f-h	1	0.02	2/24/2000 8:10	1.3	2/25/2000 8:10	1.4	2/25/2000 11:55	1.2	2/29/2000 9:35	1.2
CB	1534738	f	2	0.02	3/2/2000 9:30	1.1	3/3/2000 8:00	1.4	3/3/2000 11:45	1.2	3/7/2000 8:15	1.2
QY	1153603	m	3	0.02	3/9/2000 9:30	1.5	3/10/2000 8:20	1.5	3/10/2000 12:05	1.4	3/14/2000 14:50	1.3
DH	669695	m	4	0.02	3/16/2000 9:20	1.2	3/17/2000 8:18	1.2	3/17/2000 12:00	1.2	3/21/2000 10:10	1.3
JS2	1369111	m	5	0.02	3/23/2000 8:45	1.2	3/24/2000 8:05	1.3	3/24/2000 12:00	1.2	3/28/2000 9:50	1.2
SK	1467881	f	6	0.02	3/30/2000 8:45	1.1	3/31/2000 7:55	1.1	3/31/2000 12:05	1.2	4/4/2000 10:45	1.1
DC	1161402	f	8	0.02	4/13/2000 9:00	1.5	4/14/2000 7:50	1.1	4/14/2000 11:55	1.1	4/18/2000 9:35	1.1
GB	776140	m	9	0.02	4/20/2000 9:20	1	4/21/2000 8:50	0.7	4/21/2000 7:45	0.4	4/25/2000 9:55	1.2
GII	638333	f-h	11	0.02								
SD2	1523446	m	13	0.02								
RB2	842597	f	9	0.007								
MJ	213870	f	10	0.007								
PE	1547553	m	10	0.007								
SE	838272	f	10	0.007								
EA	921886	f	12	0.007								
LB	1083480	f-h	13	0.007								
LR	1144761	f	13	0.007								

→

					EV12	EV12	EV13	EV13	EV14	EV14	EV15	EV15
					SD19/SD20		SD19/SD20		SD19/SD20		SD20/SD21	
					E14/E15		E14/E15		E14/E15		P1	
Subject ID	Medical Record #	Sex	Set/ Group	Dose	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result	Blood-5p/ Thy. func.	Result	Blood-9a/ Thy. func.	Result
AN	1500355	f	1	0.5	3/6/2000 8:20	1.3	3/6/2000 11:45	1.1	3/6/2000 16:00		3/7/2000 9:15	1.2
DR	1514852	m	2	0.5	3/13/2000 9:00		1		3/13/2000 12:05	1	3/13/2000 17:00	0.9
JSI	1535381	m	3	0.5	3/20/2000 8:20	1.2	3/20/2000 11:55	1.1	3/20/2000 16:55	1.2	3/21/2000 9:00	1.2
CW	1435544	f	4	0.5	3/27/2000 12:32	1.2	3/27/2000 12:00	1.2	3/27/2000 17:00	1.2	3/28/2000 8:55	1.2
TO	1535981	m	5	0.5	4/3/2000 8:10		4/3/2000 12:05	1.2	4/3/2000 16:55	1.9	4/4/2000 9:10	1.3
MA	352747	m	6	0.5	4/10/2000 8:00	1.1	4/10/2000 11:45	1.2	4/10/2000 18:05	1.2	4/11/2000 9:35	1.4
AB1	1417419	f	7	0.5	4/17/2000 8:00	1.4	4/17/2000 12:00	1.3	4/17/2000 16:50	1.3	4/18/2000 8:45	1.3
RC	989288	f	8	0.5	4/24/2000 7:55	1.2	4/24/2000 11:45	1.2	4/24/2000 16:45	1.1	4/25/2000 8:00	0.8
BR	1390262	f	11	0.5	5/15/2000 8:10	1.5						
NA	1111042	m	12	0.5	5/22/2000 8:00	0.9						
RT	1406720	f-h	1	0.1	3/6/2000 8:05		1	3/6/2000 11:45	0.9	3/6/2000 16:00		3/7/2000 9:05
NR	1535899	m	3	0.1	3/20/2000 8:00	1.3	3/20/2000 11:45	1.1	3/20/2000 16:50	1.2	3/21/2000 9:05	1.2
KN	843833	m	4	0.1	3/27/2000 11:00		3/27/2000 11:45	1	3/27/2000 16:30	1	3/28/2000 9:23	1.2
JF	1192495	f	5	0.1	4/3/2000 7:50	0.9	4/3/2000 11:45		4/3/2000 16:45	0.9	4/4/2000 8:55	0.9
RB1	1539737	m	6	0.1	4/10/2000 7:50	1.3	4/10/2000 12:05	1.1	4/10/2000 17:00	1.1	4/11/2000 8:35	1.2
AH	1367467	f	7	0.1	4/17/2000 8:00	1.2	4/17/2000 12:00	1.3	4/17/2000 17:00	1.2	4/18/2000 8:45	1.2
SG	263627	f	8	0.1	4/24/2000 8:15	1.5	4/24/2000 15:37	1.4	4/24/2000 17:37	1.5	4/25/2000 9:19	1.7
AB2	1455926	m	9	0.1	5/2/2000 8:40	1.1	5/2/2000 12:05	1.1	5/2/2000 17:20	1	5/3/2000 9:10	1.1
VM	1546871	f-h	11	0.1	5/15/2000 8:25	1						
SD1	1541591	m	12	0.1	5/22/2000 11:20	0.9						
SV	501835	f-h	1	0.02	3/7/2000 8:20		3/7/2000 11:45	1.4	3/7/2000 17:00	1.3	3/8/2000 9:40	1.4
CB	1534738	f	2	0.02	3/13/2000 8:05	1.2	3/13/2000 11:55	1.3	3/13/2000 16:55	1.2	3/14/2000 10:24	1.1
QY	1153603	m	3	0.02	3/20/2000 8:15	1.4	3/20/2000 12:00	1.3	3/20/2000 17:00	1.2	3/21/2000 9:05	1.3
DH	669695	m	4	0.02	3/27/2000 12:37	1.2	3/27/2000 12:07	1.2	3/27/2000 17:05	1.1	3/28/2000 9:10	1.1
JS2	1369111	m	5	0.02	4/3/2000 8:20		4/3/2000 11:55		4/3/2000 17:00		4/4/2000 9:10	1.1
SK	1467881	f	6	0.02	4/10/2000 8:00	1.2	4/10/2000 12:00	1.1	4/10/2000 16:45	1.2	4/11/2000 8:55	1.2
DC	1161402	f	8	0.02	4/24/2000 8:10	1.5	4/24/2000 11:45	1.3	4/24/2000 16:40	1.2	4/25/2000 8:45	1.3
GB	776140	m	9	0.02	5/2/2000 8:25	1	5/2/2000 12:10	0.9	5/2/2000 16:45	0.9	5/3/2000 9:05	0.8
GII	638333	f-h	11	0.02	5/15/2000 7:57	1.1						
SD2	1523446	m	13	0.02	5/30/2000 8:00	1.1						
RB2	842597	f	9	0.007	5/1/2000 8:40	1.1						
MJ	213870	f	10	0.007	5/8/2000 9:00	1.2						
PE	1547553	m	10	0.007	5/8/2000 8:15	1.3						
SE	838272	f	10	0.007	5/8/2000 8:30	0.9						
EA	921886	f	12	0.007	5/22/2000 8:00	0.9						
LB	1083480	f-h	13	0.007	5/30/2000 8:55	1.2						
LR	1144761	f	13	0.007	5/31/2000 8:00	0.9						

					EV16	EV16	
					SD34/SD35		
					P15		
Subject ID	Medical Record #	Sex	Set/ Group	Dose	Blood-8a/ Thy. func.	Result	
AN	1500355	f	1	0.5	3/21/2000 8:35	1.3	Combined Data Base (CDB) data column.
DR	1514852	m	2	0.5	3/28/2000 9:05	1.3	From Nonmatched CDB file.
JS1	1535381	m	3	0.5	4/4/2000 8:10	1	From Matched CDB file, corrected location.
CW	1435544	f	4	0.5	4/11/2000 8:00	1.1	Duplicate in Aaron file; therefore excluded from CDB.
TO	1535981	m	5	0.5	4/18/2000 8:00	1	Value withdrawn as per the technician's notes and follow-up with the testing laboratory.
MA	352747	m	6	0.5	4/25/2000 8:05	1.4	
AB1	1417419	f	7	0.5	5/2/2000 8:00	1.4	
RC	989288	f	8	0.5	5/9/2000 8:00	1.2	
BR	1390262	f	11	0.5			
NA	1111042	m	12	0.5			
RT	1406720	f-h	1	0.1	3/21/2000 8:20	0.8	
NR	1535899	m	3	0.1	4/4/2000 8:05	1.2	
KN	843833	m	4	0.1	4/11/2000 8:00	1.1	
JF	1192495	f	5	0.1	4/18/2000 8:05	1.1	
RB1	1539737	m	6	0.1	4/25/2000 8:10	1.1	
AH	1367467	f	7	0.1	5/2/2000 8:15	1.5	
SG	263627	f	8	0.1	5/9/2000 8:40	1.2	
AB2	1455926	m	9	0.1	5/16/2000 9:40	1.1	
VM	1546871	f-h	11	0.1			
SD1	1541591	m	12	0.1			
SV	501835	f-h	1	0.02	3/22/2000 8:15	1.2	
CB	1534738	f	2	0.02	3/28/2000 8:20	1.2	
QY	1153603	m	3	0.02	4/4/2000 8:40	1.4	
DH	669695	m	4	0.02	4/11/2000 8:25	1.2	
JS2	1369111	m	5	0.02	4/18/2000 8:10	1.2	
SK	1467881	f	6	0.02	4/25/2000 8:05	1.3	
DC	1161402	f	8	0.02	5/9/2000 8:10	1	
GB	776140	m	9	0.02	5/17/2000 8:30	0.9	
GH	638333	f-h	11	0.02			
SD2	1523446	m	13	0.02			
RB2	842597	f	9	0.007			
MJ	213870	f	10	0.007			
PE	1547553	m	10	0.007			
SE	838272	f	10	0.007			
EA	921886	f	12	0.007			
LB	1083480	f-h	13	0.007			
LR	1144761	f	13	0.007			

Event:						EV1	EV1	EV2	EV2	EV3	EV3	EV4	EV4
Study Day:								SD1		SD6		SD6	
Day Designation:						PV		BV		E1		E1	
Study Version	Subject ID	Medical Record #	Sex	Set/ Group	Dose	Blood/ Thy. func.	Result	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result	Blood-4p/ Thy. func.	Result
Main	AN	1500355	f	1	0.5	2/15/2000 11:40	125	2/17/2000 8:45	147	2/22/2000 12:10	111	2/22/2000 15:45	116
Main	DR	1514852	m	2	0.5	2/22/2000 10:40	109	2/24/2000 8:30	108	2/29/2000 12:00	91	2/29/2000 16:00	80
Main	JS1	1535381	m	3	0.5	2/24/2000 15:00	114	3/2/2000 8:15	113	3/7/2000 12:10	123	3/7/2000 16:00	107
Main	CW	1435544	f	4	0.5	3/2/2000 12:15	120	3/9/2000 8:05	118	3/14/2000 12:10	109	3/14/2000 16:05	103
Main	TO	1535981	m	5	0.5	2/28/2000 13:45	85	3/16/2000 8:07	92	3/21/2000 12:02	102	3/21/2000 15:55	102
Main	MA	352747	m	6	0.5	2/18/2000 10:15	103	3/23/2000 9:08	94	3/28/2000 15:43	102	3/28/2000 16:00	105
Main	AB1	1417419	f	7	0.5	3/17/2000 13:35	119	3/30/2000 8:05	144	4/4/2000 11:45	136	4/4/2000 16:00	137
Main	RC	989288	f	8	0.5	3/31/2000 12:15	100	4/6/2000 8:00	105	4/11/2000 12:00	112	4/11/2000 16:00	115
Uptake	BR	1390262	f	11	0.5	4/21/2000 14:30	105						
Uptake	NA	1111042	m	12	0.5	5/1/2000 14:25	108						
Main	RT	1406720	f-h	1	0.1	2/15/2000 11:30	97	2/17/2000 8:15	111	2/22/2000 11:50	99	2/22/2000 16:10	89
Main	NR	1535899	m	3	0.1	2/28/2000 10:50	92	3/2/2000 8:00	103	3/7/2000 12:00	96	3/7/2000 16:00	93
Main	KN	843833	m	4	0.1	3/2/2000 13:00	109	3/9/2000 8:20	101	3/14/2000 11:43	115	3/14/2000 15:45	106
Main	JF	1192495	f	5	0.1	3/8/2000 14:55	80	3/16/2000 8:15	94	3/21/2000 11:52	109	3/21/2000 15:50	92
Main	RB1	1539737	m	6	0.1	3/15/2000 13:30	111	3/23/2000 8:00	96	3/28/2000 12:10	104	3/28/2000 15:52	109
Main	AH	1367467	f	7	0.1	3/24/2000 16:00	84	3/30/2000 8:10	106	4/4/2000 12:10	100	4/4/2000 15:45	100
Main	SG	263627	f	8	0.1	3/31/2000 12:40	123	4/6/2000 8:15	119	4/11/2000 12:00	135	4/11/2000 16:00	117
S. Main	AB2	1455926	m	9	0.1	4/4/2000 12:35	113	4/13/2000 8:10	90	4/18/2000 12:10	101	4/18/2000 16:00	117
Uptake	VM	1546871	f-h	11	0.1	4/19/2000 14:35	105						
Uptake	SD1	1541591	m	12	0.1	5/1/2000 10:35	115						
S. Main	SV	501835	f-h	1	0.02	2/15/2000 11:35	109	2/17/2000 8:30	116	2/22/2000 11:55	115	2/22/2000 15:45	120
Main	CB	1534738	f	2	0.02	2/23/2000 7:55	106	2/24/2000 9:08	86	2/29/2000 11:55	95	2/29/2000 15:45	85
Main	QY	1153603	m	3	0.02	2/25/2000 13:40	97	3/2/2000 8:45	99	NT		3/7/2000 16:00	101
Main	DII	669695	m	4	0.02	3/2/2000 14:05	90	3/9/2000 8:45	92	3/14/2000 12:18	102	3/14/2000 15:50	88
Main	JS2	1369111	m	5	0.02	2/24/2000 15:00	84	3/16/2000 8:05	100	3/21/2000 12:00	100	3/21/2000 15:52	118
Main	SK	1467881	f	6	0.02	3/2/2000 11:50	112	3/23/2000 8:15	111	3/28/2000 15:47	106	3/28/2000 15:50	125
Main	DC	1161402	f	8	0.02	3/30/2000 19:46	82	4/6/2000 8:10	92	4/11/2000 12:50	92	4/11/2000 16:00	79
S. Main	GB	776140	m	9	0.02	4/10/2000 16:28	84	4/13/2000 8:15	89	4/18/2000 12:10	85	4/18/2000 16:00	94
Uptake	GH	638333	f-h	11	0.02	4/21/2000 14:55	124						
Uptake	SD2	1523446	m	13	0.02	4/28/2000 11:45	90						
S. Uptake	RB2	842597	f	9	0.007	4/11/2000 15:30	102						
Uptake	MJ	213870	f	10	0.007	4/18/2000 16:50	97						
Uptake	PE	1547553	m	10	0.007	4/18/2000 13:40	114						
Uptake	SE	838272	f	10	0.007	4/18/2000 12:00	118						
Uptake	EA	921886	f	12	0.007	5/2/2000 12:30	103						
Uptake	LB	1083480	f-h	13	0.007	2/18/2000 14:40	88						
Uptake	LR	1144761	f	13	0.007	5/9/2000 15:40	100						

Event:					EV5	EV5	EV6	EV6	EV7	EV7	EV8	EV8
Study Day:					SD7		SD7		SD7		SD8	
Day Designation:					E2		E2		E2		E3	
Study Version	Subject ID	Medical Record #	Sex	Set/Group	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result	Blood-5p/ Thy. func.	Result	Blood-9a/ Thy. func.	Result
Main	AN	1500355	f	1	2/23/2000 8:20	147	2/23/2000 12:00	136	2/23/2000 19:26	132	2/24/2000 9:10	130
Main	DR	1514852	m	2	3/1/2000 8:45	93	3/1/2000 12:20	87	3/1/2000 16:50	77	3/2/2000 9:10	85
Main	JS1	1535381	m	3	3/8/2000 8:00	121	3/8/2000 11:55	126	3/8/2000 18:19	114	3/9/2000 9:00	107
Main	CW	1435544	f	4	3/15/2000 8:10	99	3/15/2000 12:23	104	3/15/2000 16:55	116	3/16/2000 9:00	121
Main	TO	1535981	m	5	3/22/2000 8:25	91	3/22/2000 12:00	94	3/22/2000 17:00	98	3/23/2000 9:15	102
Main	MA	352747	m	6	3/29/2000 8:15	98	3/29/2000 12:00	100	3/29/2000 18:25	111	3/30/2000 9:40	99
Main	AB1	1417419	f	7	4/5/2000 8:20	126	4/5/2000 12:10	117	4/5/2000 17:00	105	4/6/2000 8:40	127
Main	RC	989288	f	8	4/12/2000 7:50	115	4/12/2000 12:05	108	4/12/2000 17:20	115	4/13/2000 9:20	117
Uptake	BR	1390262	f	11								
Uptake	NA	1111042	m	12								
Main	RT	1406720	f-h	1	2/23/2000 8:10	106	2/23/2000 11:55	97	2/23/2000 16:05	101	2/24/2000 8:00	108
Main	NR	1535899	m	3	3/8/2000 8:05	102	3/8/2000 11:50	103	3/8/2000 17:00	115	3/9/2000 8:55	117
Main	KN	843833	m	4	3/15/2000 8:00	111	3/15/2000 11:45	107	3/15/2000 17:19	112	3/16/2000 8:25	108
Main	JF	1192495	f	5	3/22/2000 8:00	87	NT		3/22/2000 17:15	91	3/23/2000 8:45	89
Main	RB1	1539737	m	6	3/29/2000 7:45	96	3/29/2000 12:00	111	3/29/2000 17:15	105	3/30/2000 9:15	110
Main	AH	1367467	f	7	4/5/2000 8:05	102	4/5/2000 12:10	89	4/5/2000 16:50	99	4/6/2000 9:00	92
Main	SG	263627	f	8	4/12/2000 8:15	116	4/12/2000 12:00	114	4/12/2000 16:55	114	4/13/2000 9:00	120
S. Main	AB2	1455926	m	9	4/19/2000 8:45	115	4/19/2000 12:30	101	4/19/2000 16:35	102	4/20/2000 8:55	82
Uptake	VM	1546871	f-h	11								
Uptake	SD1	1541591	m	12								
S. Main	SV	501835	f-h	1	2/23/2000 8:05	134	2/23/2000 13:00	122	2/23/2000 15:45	115	2/24/2000 8:10	120
Main	CB	1534738	f	2	NT		3/1/2000 12:00	78	3/1/2000 15:45	83	3/2/2000 9:30	92
Main	QY	1153603	m	3	3/8/2000 8:10	102	3/8/2000 12:00	104	3/8/2000 17:30	111	3/9/2000 9:30	116
Main	DH	669695	m	4	3/14/2000 8:10	100	3/14/2000 11:50	101	3/16/2000 16:45	92	3/16/2000 9:20	90
Main	JS2	1369111	m	5	3/22/2000 8:30	93	3/22/2000 12:00	83	3/22/2000 17:00	88	3/23/2000 8:45	93
Main	SK	1467881	f	6	3/29/2000 8:05	111	3/29/2000 12:00	115	3/29/2000 16:45	111	3/30/2000 8:45	120
Main	DC	1161402	f	8	4/12/2000 8:20	83	4/12/2000 12:10	70	4/12/2000 17:00	80	4/13/2000 9:00	92
S. Main	GB	776140	m	9	4/19/2000 8:05	87	4/19/2000 11:45	93	4/19/2000 16:50	80	4/20/2000 9:20	79
Uptake	GH	638333	f-h	11								
Uptake	SD2	1523446	m	13								
S. Uptake	RB2	842597	f	9								
Uptake	MJ	213870	f	10								
Uptake	PE	1547553	m	10								
Uptake	SE	838272	f	10								
Uptake	EA	921886	f	12								
Uptake	LB	1083480	f-h	13								
Uptake	LR	1144761	f	13								

Event:					EV9	EV9	EV10	EV10	EV11	EV11	EV12	EV12
Study Day:					SD9		SD9		SD13		SD19/SD20	
Day Designation:					E4		E4		E8		E14/E15	
Study Version	Subject ID	Medical Record #	Sex	Set/Group	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result	Blood-9-11a/ Thy. func.	Result	Blood-8a/ Thy. func.	Result
Main	AN	1500355	f	1	2/25/2000 8:16	149	2/25/2000 13:14	140	2/29/2000 11:25	111	3/6/2000 8:20	134
Main	DR	1514852	m	2	NT		3/3/2000 12:13	92	3/7/2000 9:10	83	3/13/2000 9:00	92
Main	JS1	1535381	m	3	3/10/2000 7:55	120	3/10/2000 11:55	125	3/14/2000 9:20	112	3/20/2000 8:20	130
Main	CW	1435544	f	4	3/17/2000 8:00	129	3/17/2000 12:05	105	3/21/2000 9:20	134	3/27/2000 12:32	
Main	TO	1535981	m	5	3/24/2000 8:10	95	3/24/2000 12:00	115	3/28/2000 9:50	101	4/3/2000 8:10	84
Main	MA	352747	m	6	3/31/2000 7:50	105	3/31/2000 11:45	82	4/4/2000 10:55	95	4/10/2000 8:00	89
Main	AB1	1417419	f	7	4/7/2000 8:15	138	4/7/2000 11:45	93	4/11/2000 8:15	121	4/17/2000 8:00	126
Main	RC	989288	f	8	4/14/2000 8:00	124	4/14/2000 12:05	117	4/18/2000 10:40	129	4/24/2000 7:55	134
Uptake	BR	1390262	f	11							5/15/2000 8:10	102
Uptake	NA	1111042	m	12							5/22/2000 8:00	92
Main	RT	1406720	f-h	1	2/25/2000 7:55	91	2/25/2000 12:05	93	2/29/2000 9:30	93	3/6/2000 8:05	87
Main	NR	1535899	m	3	3/10/2000 7:59	97	3/10/2000 11:50	108	3/14/2000 10:50	108	3/20/2000 8:00	101
Main	KN	843833	m	4	3/17/2000 8:00	107	3/17/2000 11:45	103	3/21/2000 8:25	131	3/27/2000 11:00	121
Main	JF	1192495	f	5	3/24/2000 8:20	90	3/24/2000 11:40	90	3/28/2000 15:49	94	4/3/2000 7:50	81
Main	RBI	1539737	m	6	3/31/2000 8:10	107	3/31/2000 12:05	115	4/4/2000 10:55	118	4/10/2000 7:50	108
Main	AH	1367467	f	7	4/7/2000 8:00	98	4/7/2000 12:00	139	4/11/2000 9:00	107	4/17/2000 8:00	116
Main	SG	263627	f	8	4/14/2000 8:25	117	4/14/2000 12:00	129	4/18/2000 9:50	140	4/24/2000 8:15	123
S. Main	AB2	1455926	m	9	4/21/2000 7:45	86	4/21/2000 11:45	89	4/25/2000 9:10	96	5/2/2000 8:40	100
Uptake	VM	1546871	f-h	11							5/15/2000 8:25	101
Uptake	SD1	1541591	m	12							5/22/2000 11:20	124
S. Main	SV	501835	f-h	1	2/25/2000 8:10	128	2/25/2000 11:55	123	2/29/2000 9:35	120	3/7/2000 8:20	120
Main	CB	1534738	f	2	3/3/2000 8:00	113	3/3/2000 11:45	99	3/7/2000 8:15	92	3/13/2000 8:05	96
Main	QY	1153603	m	3	3/10/2000 8:20	113	3/10/2000 12:05	121	3/14/2000 14:50	97	3/20/2000 8:15	95
Main	DH	669695	m	4	3/17/2000 8:18	89	3/17/2000 12:00	79	3/21/2000 10:10	102	3/27/2000 12:37	
Main	JS2	1369111	m	5	3/24/2000 8:05	90	3/24/2000 12:00	72	3/28/2000 9:50	98	4/3/2000 8:20	116
Main	SK	1467881	f	6	3/31/2000 7:55	127	3/31/2000 12:05	97	4/4/2000 10:45	130	4/10/2000 8:00	106
Main	DC	1161402	f	8	4/14/2000 7:50	84	4/14/2000 11:55	82	4/18/2000 9:35	101	4/24/2000 8:10	98
S. Main	GB	776140	m	9	4/21/2000 8:50	76	4/21/2000 7:45	82	4/25/2000 9:55	84	5/2/2000 8:25	94
Uptake	GH	638333	f-h	11							5/15/2000 7:57	130
Uptake	SD2	1523446	m	13							5/30/2000 8:00	81
S. Uptake	RB2	842597	f	9							5/1/2000 8:40	93
Uptake	MJ	213870	f	10							5/8/2000 9:00	84
Uptake	PE	1547553	m	10							5/8/2000 8:15	123
Uptake	SE	838272	f	10							5/8/2000 8:30	117
Uptake	EA	921886	f	12							5/22/2000 8:00	97
Uptake	LB	1083480	f-h	13							5/30/2000 8:55	98
Uptake	LR	1144761	f	13							5/31/2000 8:00	97

File: Att6-Thyroid Function Data 2001-02-02 5xFT4.xls  
 Tab: T3 TOTAL,SERUM

Event:					EV13	EV13	EV14	EV14	EV15	EV15	EV16	EV16
Study Day:					SD19/SD20		SD19/SD20		SD20/SD21		SD34/SD35	
Day Designation:					E14/E15		E14/E15		P1		P15	
Study Version	Subject ID	Medical Record #	Sex	Set/Group	Blood-12p/ Thy. func.	Result	Blood-5p/ Thy. func.	Result	Blood-9a/ Thy. func.	Result	Blood-8a/ Thy. func.	Result
Main	AN	1500355	f	1	3/6/2000 11:45	141	3/6/2000 16:00	121	3/7/2000 9:15	126	3/21/2000 8:35	126
Main	DR	1514852	m	2	3/13/2000 12:05	103	3/13/2000 17:00	101	3/14/2000 8:40	100	3/28/2000 9:05	98
Main	JS1	1535381	m	3	3/20/2000 11:55	141	3/20/2000 16:55	135	3/21/2000 9:00	148	4/4/2000 8:10	121
Main	CW	1435544	f	4	3/27/2000 12:00	105	3/27/2000 17:00	108	3/28/2000 8:55	130	4/11/2000 8:00	121
Main	TO	1535981	m	5	4/3/2000 12:05	99	4/3/2000 16:55	98	4/4/2000 9:10	94	4/18/2000 8:00	83
Main	MA	352747	m	6	4/10/2000 11:45	96	4/10/2000 18:05	116	4/11/2000 9:35	96	4/25/2000 8:05	95
Main	AB1	1417419	f	7	4/17/2000 12:00	128	4/17/2000 16:50	130	4/18/2000 8:45	131	5/2/2000 8:00	166
Main	RC	989288	f	8	4/24/2000 11:45	124	4/24/2000 16:45	110	4/25/2000 8:00	153	5/9/2000 8:00	154
Uptake	BR	1390262	f	11								
Uptake	NA	1111042	m	12								
Main	RT	1406720	f-h	1	3/6/2000 11:45	92	3/6/2000 16:00	96	3/7/2000 9:05	100	3/21/2000 8:20	120
Main	NR	1535899	m	3	3/20/2000 11:45	94	3/20/2000 16:50	105	3/21/2000 9:05	127	4/4/2000 8:05	111
Main	KN	843833	m	4	3/27/2000 11:45	117	3/27/2000 16:30	103	3/28/2000 9:23	106	4/11/2000 8:00	107
Main	JF	1192495	f	5	4/3/2000 11:45	101	4/3/2000 16:45	95	4/4/2000 8:55	86	4/18/2000 8:05	
Main	RB1	1539737	m	6	4/10/2000 12:05	109	4/10/2000 17:00	124	4/11/2000 8:35	113	4/25/2000 8:10	94
Main	AH	1367467	f	7	4/17/2000 12:00	102	4/17/2000 17:00	112	4/18/2000 8:45	109	5/2/2000 8:15	102
Main	SG	263627	f	8	4/24/2000 15:37	130	4/24/2000 17:37	113	4/25/2000 9:19	120	5/9/2000 8:40	115
S. Main	AB2	1455926	m	9	5/2/2000 12:05	104	5/2/2000 17:20	102	5/3/2000 9:10	94	5/16/2000 9:40	90
Uptake	VM	1546871	f-h	11								
Uptake	SD1	1541591	m	12								
S. Main	SV	501835	f-h	1	3/7/2000 11:45	111	3/7/2000 17:00	111	3/8/2000 9:40	115	3/22/2000 8:15	111
Main	CB	1534738	f	2	3/13/2000 11:55	89	3/13/2000 16:55	97	3/14/2000 10:24	110	3/28/2000 8:20	107
Main	QY	1153603	m	3	3/20/2000 12:00	109	3/20/2000 17:00	117	3/21/2000 9:05	111	4/4/2000 8:40	98
Main	DII	669695	m	4	3/27/2000 12:07	87	3/27/2000 17:05	92	3/28/2000 9:10	95	4/11/2000 8:25	87
Main	JS2	1369111	m	5	4/3/2000 11:55	98	4/3/2000 17:00	110	4/4/2000 9:10	86	4/18/2000 8:10	103
Main	SK	1467881	f	6	4/10/2000 12:00	98	4/10/2000 16:45	96	4/11/2000 8:55	117	4/25/2000 8:05	116
Main	DC	1161402	f	8	4/24/2000 11:45	97	4/24/2000 16:40	91	4/25/2000 8:45	93	5/9/2000 8:10	82
S. Main	GB	776140	m	9	5/2/2000 12:10	89	5/2/2000 16:45	87	5/3/2000 9:05	84	5/17/2000 8:30	89
Uptake	GH	638333	f-h	11								
Uptake	SD2	1523446	m	13								
S. Uptake	RB2	842597	f	9								
Uptake	MJ	213870	f	10								
Uptake	PE	1547553	m	10								
Uptake	SE	838272	f	10								
Uptake	EA	921886	f	12								
Uptake	LB	1083480	f-h	13								
Uptake	LR	1144761	f	13								

**Event:**

**Study Day:**

**Day Designation:**

Study Version	Subject ID	Medical Record #	Sex	Set/ Group	
Main	AN	1500355	f	1	Combined Data Base (CDB) data column.
Main	DR	1514852	m	2	From Nonmatched CDB file.
Main	JS1	1535381	m	3	[REDACTED] From Matched CDB file, corrected location.
Main	CW	1435544	f	4	Duplicate in Aaron file; therefore excluded from CDB.
Main	TO	1535981	m	5	
Main	MA	352747	m	6	
Main	AB1	1417419	f	7	
Main	RC	989288	f	8	
Uptake	BR	1390262	f	11	
Uptake	NA	1111042	m	12	
Main	RT	1406720	f-h	1	
Main	NR	1535899	m	3	
Main	KN	843833	m	4	
Main	JF	1192495	f	5	
Main	RB1	1539737	m	6	
Main	AH	1367467	f	7	
Main	SG	263627	f	8	
S. Main	AB2	1455926	m	9	
Uptake	VM	1546871	f-h	11	
Uptake	SD1	1541591	m	12	
S. Main	SV	501835	f-h	1	
Main	CB	1534738	f	2	
Main	QY	1153603	m	3	
Main	DH	669695	m	4	
Main	JS2	1369111	m	5	
Main	SK	1467881	f	6	
Main	DC	1161402	f	8	
S. Main	GB	776140	m	9	
Uptake	GH	638333	f-h	11	
Uptake	SD2	1523446	m	13	
S. Uptake	RB2	842597	f	9	
Uptake	MJ	213870	f	10	
Uptake	PE	1547553	m	10	
Uptake	SE	838272	f	10	
Uptake	EA	921886	f	12	
Uptake	LB	1083480	f-h	13	
Uptake	LR	1144761	f	13	

Event:						EV1	EV1	EV2	EV2	EV3	EV3	EV4	EV4
Study Day:								SD1		SD6		SD6	
Day Designation:						PV		BV		E1		E1	
Study Version	Subject ID	Medical Record #	Sex	Set/ Group	Dose	Blood/ Thy. func.	Result	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result	Blood-4p/ Thy. func.	Result
Main	AN	1500355	f	1	0.5	2/15/2000 11:40	10.6	2/17/2000 8:45	10.4	2/22/2000 12:10	9.2	2/22/2000 15:45	9.2
Main	DR	1514852	m	2	0.5	2/22/2000 10:40	7	2/24/2000 8:30	6.7	2/29/2000 12:00	6.4	2/29/2000 16:00	6.5
Main	JS1	1535381	m	3	0.5	2/24/2000 15:00	6.3	3/2/2000 8:15	6.8	3/7/2000 12:10	7.1	3/7/2000 16:00	6.2
Main	CW	1435544	f	4	0.5	3/2/2000 12:15	9.4	3/9/2000 8:05	7	3/14/2000 12:10	7.4	3/14/2000 16:05	6.7
Main	TO	1535981	m	5	0.5	2/28/2000 13:45	5	3/16/2000 8:07	5.7	3/21/2000 12:02	5.7	3/21/2000 15:55	5.7
Main	MA	352747	m	6	0.5	2/18/2000 10:15	8.1	3/23/2000 9:08	6.5	3/28/2000 15:43	7.5	3/28/2000 16:00	6.9
Main	AB1	1417419	f	7	0.5	3/17/2000 13:35	8.8	3/30/2000 8:05	9.8	4/4/2000 11:45	12.2	4/4/2000 16:00	11.6
Main	RC	989288	f	8	0.5	3/31/2000 12:15	4.5	4/6/2000 8:00	5.6	4/11/2000 12:00	6	4/11/2000 16:00	5.3
Uptake	BR	1390262	f	11	0.5	4/21/2000 14:30	9.3						
Uptake	NA	1111042	m	12	0.5	5/1/2000 14:25	7.5						
Main	RT	1406720	f-h	1	0.1	2/15/2000 11:30	8	2/17/2000 8:15	6.8	2/22/2000 11:50	6.3	2/22/2000 16:10	6.4
Main	NR	1535899	m	3	0.1	2/28/2000 10:50	5.7	3/2/2000 8:00	7.3	3/7/2000 12:00	6	3/7/2000 16:00	6
Main	KN	843833	m	4	0.1	3/2/2000 13:00	6.1	3/9/2000 8:20	6.4	3/14/2000 11:43	7.1	3/14/2000 15:45	7.4
Main	JF	1192495	f	5	0.1	3/8/2000 14:55	4.8	3/16/2000 8:15	6	3/21/2000 11:52	6.2	3/21/2000 15:50	5.8
Main	RB1	1539737	m	6	0.1	3/15/2000 13:30	8	3/23/2000 8:00	6.9	3/28/2000 12:10	7	3/28/2000 15:52	6.4
Main	AH	1367467	f	7	0.1	3/24/2000 16:00	6.6	3/30/2000 8:10	7.1	4/4/2000 12:10	8.7	4/4/2000 15:45	8.7
Main	SG	263627	f	8	0.1	3/31/2000 12:40	9.2	4/6/2000 8:15	9.6	4/11/2000 12:00	9.7	4/11/2000 16:00	9.1
S. Main	AB2	1455926	m	9	0.1	4/4/2000 12:35	8.1	4/13/2000 8:10	6.9	4/18/2000 12:10	5.9	4/18/2000 16:00	6.9
Uptake	VM	1546871	f-h	11	0.1	4/19/2000 14:35	7.1						
Uptake	SD1	1541591	m	12	0.1	5/1/2000 10:35	8.7						
S. Main	SV	501835	f-h	1	0.02	2/15/2000 11:35	9.6	2/17/2000 8:30	11	2/22/2000 11:55	10.3	2/22/2000 15:45	11
Main	CB	1534738	f	2	0.02	2/23/2000 7:55	5.4	2/24/2000 9:08	5.9	2/29/2000 11:55	6.1	2/29/2000 15:45	5.7
Main	QY	1153603	m	3	0.02	2/25/2000 13:40	9.3	3/2/2000 8:45	9.1	NT		3/7/2000 16:00	8.2
Main	DH	669695	m	4	0.02	3/2/2000 14:05	5.7	3/9/2000 8:45	4.6	3/14/2000 12:18	5.4	3/14/2000 15:50	4.7
Main	JS2	1369111	m	5	0.02	2/24/2000 15:00	5.9	3/16/2000 8:05	7.3	3/21/2000 12:00	6.8	3/21/2000 15:52	6.6
Main	SK	1467881	f	6	0.02	3/2/2000 11:50	9.5	3/23/2000 8:15	9.6	3/28/2000 15:47	10	3/28/2000 15:50	9.2
Main	DC	1161402	f	8	0.02	3/30/2000 19:46	5.9	4/6/2000 8:10	8.4	4/11/2000 12:50	7.6	4/11/2000 16:00	6.7
S. Main	GB	776140	m	9	0.02	4/10/2000 16:28	3.9	4/13/2000 8:15	4.7	4/18/2000 12:10	5	4/18/2000 16:00	5.3
Uptake	GH	638333	f-h	11	0.02	4/21/2000 14:55	10						
Uptake	SD2	1523446	m	13	0.02	4/28/2000 11:45	5.8						
S. Uptake	RB2	842597	f	9	0.007	4/11/2000 15:30	6.4						
Uptake	MJ	213870	f	10	0.007	4/18/2000 16:50	6.5						
Uptake	PE	1547553	m	10	0.007	4/18/2000 13:40	7.5						
Uptake	SE	838272	f	10	0.007	4/18/2000 12:00	7.5						
Uptake	EA	921886	f	12	0.007	5/2/2000 12:30	8.1						
Uptake	LB	1083480	f-h	13	0.007	2/18/2000 14:40	6.3						
Uptake	LR	1144761	f	13	0.007	5/9/2000 15:40	8						

Event:					EV5	EV5	EV6	EV6	EV7	EV7	EV8	EV8
Study Day:					SD7		SD7		SD7		SD8	
Day Designation:					E2		E2		E2		E3	
Study Version	Subject ID	Medical Record #	Sex	Set/Group	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result	Blood-5p/ Thy. func.	Result	Blood-9a/ Thy. func.	Result
Main	AN	1500355	f	1	2/23/2000 8:20	9.5	2/23/2000 12:00	9.5	2/23/2000 19:26	9.4	2/24/2000 9:10	8.8
Main	DR	1514852	m	2	3/1/2000 8:45	7.2	3/1/2000 12:20	6.7	3/1/2000 16:50	7.3	3/2/2000 9:10	7.2
Main	JS1	1535381	m	3	3/8/2000 8:00	6.4	3/8/2000 11:55	6.8	3/8/2000 18:19	6.6	3/9/2000 9:00	5.8
Main	CW	1435544	f	4	3/15/2000 8:10	7.6	3/15/2000 12:23	7.1	3/15/2000 16:55	7.4	3/16/2000 9:00	7.9
Main	TO	1535981	m	5	3/22/2000 8:25	5.6	3/22/2000 12:00	5	3/22/2000 17:00	5.9	3/23/2000 9:15	5.3
Main	MA	352747	m	6	3/29/2000 8:15	6.7	3/29/2000 12:00	7.2	3/29/2000 18:25	7.5	3/30/2000 9:40	8.2
Main	AB1	1417419	f	7	4/5/2000 8:20	9.4	4/5/2000 12:10	9.6	4/5/2000 17:00	10.1	4/6/2000 8:40	11.2
Main	RC	989288	f	8	4/12/2000 7:50	5.5	4/12/2000 12:05	6.4	4/12/2000 17:20	5.1	4/13/2000 9:20	7.1
Uptake	BR	1390262	f	11								
Uptake	NA	1111042	m	12								
Main	RT	1406720	f-h	1	2/23/2000 8:10	5.5	2/23/2000 11:55	6.8	2/23/2000 16:05	6.5	2/24/2000 8:00	6.6
Main	NR	1535899	m	3	3/8/2000 8:05	7	3/8/2000 11:50	7.2	3/8/2000 17:00	6.3	3/9/2000 8:55	6.7
Main	KN	843833	m	4	3/15/2000 8:00	7.3	3/15/2000 11:45	6.4	3/15/2000 17:19	6.7	3/16/2000 8:25	6.5
Main	JF	1192495	f	5	3/22/2000 8:00	5.3	NT		3/22/2000 17:15	5.3	3/23/2000 8:45	4.9
Main	RB1	1539737	m	6	3/29/2000 7:45	6.6	3/29/2000 12:00	7.6	3/29/2000 17:15	6.7	3/30/2000 9:15	8.6
Main	AH	1367467	f	7	4/5/2000 8:05	6.4	4/5/2000 12:10	7.7	4/5/2000 16:50	7.7	4/6/2000 9:00	7.5
Main	SG	263627	f	8	4/12/2000 8:15	8.6	4/12/2000 12:00	8.7	4/12/2000 16:55	9.2	4/13/2000 9:00	10.2
S. Main	AB2	1455926	m	9	4/19/2000 8:45	5.8	4/19/2000 12:30	6.3	4/19/2000 16:35	6.5	4/20/2000 8:55	5.4
Uptake	VM	1546871	f-h	11								
Uptake	SD1	1541591	m	12								
S. Main	SV	501835	f-h	1	2/23/2000 8:05	10.5	2/23/2000 13:00	10	2/23/2000 15:45	10.7	2/24/2000 8:10	10.8
Main	CB	1534738	f	2	NT		3/1/2000 12:00	6.3	3/1/2000 15:45	5.5	3/2/2000 9:30	6.6
Main	QY	1153603	m	3	3/8/2000 8:10	8.8	3/8/2000 12:00	9.2	3/8/2000 17:30	7.7	3/9/2000 9:30	7.9
Main	DH	669695	m	4	3/14/2000 8:10	4.9	3/14/2000 11:50	5.4	3/16/2000 16:45	5.6	3/16/2000 9:20	6.3
Main	JS2	1369111	m	5	3/22/2000 8:30	6.6	3/22/2000 12:00	7.1	3/22/2000 17:00	6.5	3/23/2000 8:45	6.8
Main	SK	1467881	f	6	3/29/2000 8:05	9.1	3/29/2000 12:00	10.3	3/29/2000 16:45	9.6	3/30/2000 8:45	10
Main	DC	1161402	f	8	4/12/2000 8:20	7	4/12/2000 12:10	7.7	4/12/2000 17:00	6.7	4/13/2000 9:00	7.6
S. Main	GB	776140	m	9	4/19/2000 8:05	4.2	4/19/2000 11:45	4.5	4/19/2000 16:50	4.5	4/20/2000 9:20	4.7
Uptake	GH	638333	f-h	11								
Uptake	SD2	1523446	m	13								
S. Uptake	RB2	842597	f	9								
Uptake	MJ	213870	f	10								
Uptake	PE	1547553	m	10								
Uptake	SE	838272	f	10								
Uptake	EA	921886	f	12								
Uptake	LB	1083480	f-h	13								
Uptake	LR	1144761	f	13								

Event:					EV9	EV9	EV10	EV10	EV11	EV11	EV12	EV12
Study Day:					SD9		SD9		SD13		SD19/SD20	
Day Designation:					E4		E4		E8		E14/E15	
Study Version	Subject ID	Medical Record #	Sex	Set/Group	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result	Blood-9-11a/ Thy. func.	Result	Blood-8a/ Thy. func.	Result
Main	AN	1500355	f	1	2/25/2000 8:16	9.8	2/25/2000 13:14	9.2	2/29/2000 11:25	8.8	3/6/2000 8:20	8.7
Main	DR	1514852	m	2	NT		3/3/2000 12:13	6.3	3/7/2000 9:10	6.6	3/13/2000 9:00	5.8
Main	JSI	1535381	m	3	3/10/2000 7:55	6.1	3/10/2000 11:55	5.8	3/14/2000 9:20	7.6	3/20/2000 8:20	7.7
Main	CW	1435544	f	4	3/17/2000 8:00	8	3/17/2000 12:05	7.9	3/21/2000 9:20	9	3/27/2000 12:32	
Main	TO	1535981	m	5	3/24/2000 8:10	5.4	3/24/2000 12:00	5.9	3/28/2000 9:50	7	4/3/2000 8:10	5.4
Main	MA	352747	m	6	3/31/2000 7:50	6.2	3/31/2000 11:45	7.6	4/4/2000 10:55	8.2	4/10/2000 8:00	6.7
Main	AB1	1417419	f	7	4/7/2000 8:15	10.9	4/7/2000 11:45	6.8	4/11/2000 8:15	10.6	4/17/2000 8:00	9.5
Main	RC	989288	f	8	4/14/2000 8:00	5.3	4/14/2000 12:05	6.1	4/18/2000 10:40	10	4/24/2000 7:55	8.4
Uptake	BR	1390262	f	11							5/15/2000 8:10	9.1
Uptake	NA	1111042	m	12							5/22/2000 8:00	7.8
Main	RT	1406720	f-h	1	2/25/2000 7:55	6.3	2/25/2000 12:05	6	2/29/2000 9:30	6.5	3/6/2000 8:05	4.4
Main	NR	1535899	m	3	3/10/2000 7:59	6	3/10/2000 11:50	6	3/14/2000 10:50	6.4	3/20/2000 8:00	6.1
Main	KN	843833	m	4	3/17/2000 8:00	6.5	3/17/2000 11:45	6.8	3/21/2000 8:25	7.3	3/27/2000 11:00	6.8
Main	JF	1192495	f	5	3/24/2000 8:20	5	3/24/2000 11:40	5.1	3/28/2000 15:49	6.1	4/3/2000 7:50	4.7
Main	RB1	1539737	m	6	3/31/2000 8:10	6.3	3/31/2000 12:05	8.2	4/4/2000 10:55	8.5	4/10/2000 7:50	7.8
Main	AH	1367467	f	7	4/7/2000 8:00	6.1	4/7/2000 12:00	11.1	4/11/2000 9:00	9.7	4/17/2000 8:00	6.9
Main	SG	263627	f	8	4/14/2000 8:25	8.6	4/14/2000 12:00	8.8	4/18/2000 9:50	13.1	4/24/2000 8:15	9.3
S. Main	AB2	1455926	m	9	4/21/2000 7:45	6.1	4/21/2000 11:45	6.6	4/25/2000 9:10	5.6	5/2/2000 8:40	5.7
Uptake	VM	1546871	f-h	11							5/15/2000 8:25	6
Uptake	SD1	1541591	m	12							5/22/2000 11:20	7.9
S. Main	SV	501835	f-h	1	2/25/2000 8:10	11.6	2/25/2000 11:55	10.8	2/29/2000 9:35	10.8	3/7/2000 8:20	10.4
Main	CB	1534738	f	2	3/3/2000 8:00	6	3/3/2000 11:45	5.3	3/7/2000 8:15	6.3	3/13/2000 8:05	6.2
Main	QY	1153603	m	3	3/10/2000 8:20	7.7	3/10/2000 12:05	8.3	3/14/2000 14:50	8.8	3/20/2000 8:15	7.9
Main	DII	669695	m	4	3/17/2000 8:18	5.5	3/17/2000 12:00	5.4	3/21/2000 10:10	6.2	3/27/2000 12:37	
Main	JS2	1369111	m	5	3/24/2000 8:05	6.6	3/24/2000 12:00	6.4	3/28/2000 9:50	6.8	4/3/2000 8:20	6.7
Main	SK	1467881	f	6	3/31/2000 7:55	8.4	3/31/2000 12:05	9.9	4/4/2000 10:45	10.1	4/10/2000 8:00	10.3
Main	DC	1161402	f	8	4/14/2000 7:50	6.7	4/14/2000 11:55	7.4	4/18/2000 9:35	7.7	4/24/2000 8:10	7.9
S. Main	GB	776140	m	9	4/21/2000 8:50	4.3	4/21/2000 7:45	5.3	4/25/2000 9:55	4.7	5/2/2000 8:25	4.6
Uptake	GH	638333	f-h	11							5/15/2000 7:57	11
Uptake	SD2	1523446	m	13							5/30/2000 8:00	4.7
S. Uptake	RB2	842597	f	9							5/1/2000 8:40	6.1
Uptake	MJ	213870	f	10							5/8/2000 9:00	6.1
Uptake	PE	1547553	m	10							5/8/2000 8:15	6.4
Uptake	SE	838272	f	10							5/8/2000 8:30	6.7
Uptake	EA	921886	f	12							5/22/2000 8:00	6.5
Uptake	LB	1083480	f-h	13							5/30/2000 8:55	5.2
Uptake	LR	1144761	f	13							5/31/2000 8:00	8.4

Event:					EV13	EV13	EV14	EV14	EV15	EV15	EV16	EV16
Study Day:					SD19/SD20		SD19/SD20		SD20/SD21		SD34/SD35	
Day Designation:					E14/E15		E14/E15		P1		P15	
Study Version	Subject ID	Medical Record #	Sex	Set/Group	Blood-12p/ Thy. func.	Result	Blood-5p/ Thy. func.	Result	Blood-9a/ Thy. func.	Result	Blood-8a/ Thy. func.	Result
Main	AN	1500355	f	1	3/6/2000 11:45	8.4	3/6/2000 16:00	8.3	3/7/2000 9:15	9.5	3/21/2000 8:35	8.9
Main	DR	1514852	m	2	3/13/2000 12:05	6.4	3/13/2000 17:00	6	3/14/2000 8:40	5.6	3/28/2000 9:05	6.5
Main	JS1	1535381	m	3	3/20/2000 11:55	8.4	3/20/2000 16:55	7	3/21/2000 9:00	7.3	4/4/2000 8:10	6.8
Main	CW	1435544	f	4	3/27/2000 12:00	9.1	3/27/2000 17:00	8.2	3/28/2000 8:55	8.7	4/11/2000 8:00	8.1
Main	TO	1535981	m	5	4/3/2000 12:05	5.6	4/3/2000 16:55	5.7	4/4/2000 9:10	6.3	4/18/2000 8:00	4.7
Main	MA	352747	m	6	4/10/2000 11:45	6.4	4/10/2000 18:05	6.2	4/11/2000 9:35	6.7	4/25/2000 8:05	7.5
Main	ABI	1417419	f	7	4/17/2000 12:00	11.1	4/17/2000 16:50	10.3	4/18/2000 8:45	11.2	5/2/2000 8:00	11.1
Main	RC	989288	f	8	4/24/2000 11:45	7.7	4/24/2000 16:45	7.6	4/25/2000 8:00	8	5/9/2000 8:00	9.1
Uptake	BR	1390262	f	11								
Uptake	NA	1111042	m	12								
Main	RT	1406720	f-h	1	3/6/2000 11:45	4.9	3/6/2000 16:00	5.4	3/7/2000 9:05	5.8	3/21/2000 8:20	5.5
Main	NR	1535899	m	3	3/20/2000 11:45	5.8	3/20/2000 16:50	6	3/21/2000 9:05	6.7	4/4/2000 8:05	7.3
Main	KN	843833	m	4	3/27/2000 11:45	7	3/27/2000 16:30	6.5	3/28/2000 9:23		4/11/2000 8:00	7
Main	JF	1192495	f	5	4/3/2000 11:45	4.9	4/3/2000 16:45	4.5	4/4/2000 8:55	5.5	4/18/2000 8:05	
Main	RB1	1539737	m	6	4/10/2000 12:05	7.4	4/10/2000 17:00	7	4/11/2000 8:35	7.3	4/25/2000 8:10	6.5
Main	AH	1367467	f	7	4/17/2000 12:00	8	4/17/2000 17:00	8.1	4/18/2000 8:45	6.8	5/2/2000 8:15	6.5
Main	SG	263627	f	8	4/24/2000 15:37	9.8	4/24/2000 17:37	9.6	4/25/2000 9:19	9.8	5/9/2000 8:40	9.9
S. Main	AB2	1455926	m	9	5/2/2000 12:05	6.1	5/2/2000 17:20	5.7	5/3/2000 9:10	5.9	5/16/2000 9:40	6.9
Uptake	VM	1546871	f-h	11								
Uptake	SD1	1541591	m	12								
S. Main	SV	501835	f-h	1	3/7/2000 11:45	9.6	3/7/2000 17:00	10	3/8/2000 9:40	10.9	3/22/2000 8:15	11
Main	CB	1534738	f	2	3/13/2000 11:55	6.8	3/13/2000 16:55	7.2	3/14/2000 10:24	7	3/28/2000 8:20	7.2
Main	QY	1153603	m	3	3/20/2000 12:00	8.2	3/20/2000 17:00	7.4	3/21/2000 9:05	7.8	4/4/2000 8:40	8.8
Main	DH	669695	m	4	3/27/2000 12:07	5.8	3/27/2000 17:05	5.4	3/28/2000 9:10	6	4/11/2000 8:25	5.1
Main	JS2	1369111	m	5	4/3/2000 11:55	7.2	4/3/2000 17:00	6.9	4/4/2000 9:10	6.8	4/18/2000 8:10	6.8
Main	SK	1467881	f	6	4/10/2000 12:00	9.9	4/10/2000 16:45	9.7	4/11/2000 8:55	12.5	4/25/2000 8:05	10.3
Main	DC	1161402	f	8	4/24/2000 11:45	8.1	4/24/2000 16:40	7.3	4/25/2000 8:45	7	5/9/2000 8:10	7.2
S. Main	GB	776140	m	9	5/2/2000 12:10	4.5	5/2/2000 16:45	4.3	5/3/2000 9:05	5.1	5/17/2000 8:30	4.4
Uptake	GH	638333	f-h	11								
Uptake	SD2	1523446	m	13								
S. Uptake	RB2	842597	f	9								
Uptake	MJ	213870	f	10								
Uptake	PE	1547553	m	10								
Uptake	SE	838272	f	10								
Uptake	EA	921886	f	12								
Uptake	LB	1083480	f-h	13								
Uptake	LR	1144761	f	13								

Event:

Study Day:

Day Designation:

Study Version	Subject ID	Medical Record #	Sex	Set/ Group	
Main	AN	1500355	f	1	Combined Data Base (CDB) data column.
Main	DR	1514852	m	2	From Nonmatched CDB file.
Main	JS1	1535381	m	3	From Matched CDB file, corrected location.
Main	CW	1435544	f	4	Duplicate in Aaron file; therefore excluded
Main	TO	1535981	m	5	
Main	MA	352747	m	6	
Main	AB1	1417419	f	7	
Main	RC	989288	f	8	
Uptake	BR	1390262	f	11	
Uptake	NA	1111042	m	12	
Main	RT	1406720	f-h	1	
Main	NR	1535899	m	3	
Main	KN	843833	m	4	
Main	JF	1192495	f	5	
Main	RB1	1539737	m	6	
Main	AH	1367467	f	7	
Main	SG	263627	f	8	
S. Main	AB2	1455926	m	9	
Uptake	VM	1546871	f-h	11	
Uptake	SD1	1541591	m	12	
S. Main	SV	501835	f-h	1	
Main	CB	1534738	f	2	
Main	QY	1153603	m	3	
Main	DH	669695	m	4	
Main	JS2	1369111	m	5	
Main	SK	1467881	f	6	
Main	DC	1161402	f	8	
S. Main	GB	776140	m	9	
Uptake	GH	638333	f-h	11	
Uptake	SD2	1523446	m	13	
S. Uptake	RB2	842597	f	9	
Uptake	MJ	213870	f	10	
Uptake	PE	1547553	m	10	
Uptake	SE	838272	f	10	
Uptake	EA	921886	f	12	
Uptake	LB	1083480	f-h	13	
Uptake	LR	1144761	f	13	

Event:						EV1	EV1	EV2	EV2	EV3	EV3
Study Day:							SD1		SD6		
Day Designation:						PV	BV		E1		
Study Version	Subject ID	Medical Record #	Sex	Set/ Group	Dose	Blood/ Thy. func.	Result	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result
Main	AN	1500355	f	1	0.5	2/15/2000 11:40	4	2/17/2000 8:45	3.4	2/22/2000 12:10	4
Main	DR	1514852	m	2	0.5	2/22/2000 10:40	1.9	2/24/2000 8:30	2.1	2/29/2000 12:00	1.8
Main	JS1	1535381	m	3	0.5	2/24/2000 15:00	0.68	3/2/2000 8:15	1.3	3/7/2000 12:10	0.73
Main	CW	1435544	f	4	0.5	3/2/2000 12:15	2.5	3/9/2000 8:05	3.2	3/14/2000 12:10	2.2
Main	TO	1535981	m	5	0.5	2/28/2000 13:45		3/16/2000 8:07	2.3	3/21/2000 12:02	3.6
Main	MA	352747	m	6	0.5	2/18/2000 10:15	3	3/23/2000 9:08	1.9	3/28/2000 15:43	2.9
Main	AB1	1417419	f	7	0.5	3/17/2000 13:35	0.84	3/30/2000 8:05	2.8	4/4/2000 11:45	1.2
Main	RC	989288	f	8	0.5	3/31/2000 12:15	2.1	4/6/2000 8:00	4.7	4/11/2000 12:00	2
Uptake	BR	1390262	f	11	0.5	4/21/2000 14:30	0.5				
Uptake	NA	1111042	m	12	0.5	5/1/2000 14:25	2.8				
Main	RT	1406720	f-h	1	0.1	2/15/2000 11:30	1.9	2/17/2000 8:15	2	2/22/2000 11:50	1.5
Main	NR	1535899	m	3	0.1	2/28/2000 10:50	1.1	3/2/2000 8:00	2	3/7/2000 12:00	2
Main	KN	843833	m	4	0.1	3/2/2000 13:00	2	3/9/2000 8:20	1.8	3/14/2000 11:43	2.3
Main	JF	1192495	f	5	0.1	3/8/2000 14:55	2.6	3/16/2000 8:15	1.6	3/21/2000 11:52	1.8
Main	RB1	1539737	m	6	0.1	3/15/2000 13:30		3/23/2000 8:00	1.6	3/28/2000 12:10	2
Main	AH	1367467	f	7	0.1	3/24/2000 16:00	1.1	3/30/2000 8:10	1.5	4/4/2000 12:10	1.8
Main	SG	263627	f	8	0.1	3/31/2000 12:40	1	4/6/2000 8:15	1.2	4/11/2000 12:00	1.3
S. Main	AB2	1455926	m	9	0.1	4/4/2000 12:35	0.67	4/13/2000 8:10	1.1	4/18/2000 12:10	0.9
Uptake	VM	1546871	f-h	11	0.1	4/19/2000 14:35	4.9				
Uptake	SD1	1541591	m	12	0.1	5/1/2000 10:35	1.6				
S. Main	SV	501835	f-h	1	0.02	2/15/2000 11:35	1.1	2/17/2000 8:30	1.2	2/22/2000 11:55	1.1
Main	CB	1534738	f	2	0.02	2/23/2000 7:55	2.2	2/24/2000 9:08	1.5	2/29/2000 11:55	1.1
Main	QY	1153603	m	3	0.02	2/25/2000 13:40	0.82	3/2/2000 8:45	0.74	NT	
Main	DH	669695	m	4	0.02	3/2/2000 14:05	2.6	3/9/2000 8:45	3.7	3/14/2000 12:18	5.7
Main	JS2	1369111	m	5	0.02	2/24/2000 15:00	1	3/16/2000 8:05	1.3	3/21/2000 12:00	0.94
Main	SK	1467881	f	6	0.02	3/2/2000 11:50	2.9	3/23/2000 8:15	3.2	3/28/2000 15:47	2.6
Main	DC	1161402	f	8	0.02	3/30/2000 19:46	0.97	4/6/2000 8:10	2	4/11/2000 12:50	1.6
S. Main	GB	776140	m	9	0.02	4/10/2000 16:28	2.9	4/13/2000 8:15	3.6	4/18/2000 12:10	2.8
Uptake	GH	638333	f-h	11	0.02	4/21/2000 14:55	0.9				
Uptake	SD2	1523446	m	13	0.02	4/28/2000 11:45	4.5				
S. Uptake	RB2	842597	f	9	0.007	4/11/2000 15:30	2.2				
Uptake	MJ	213870	f	10	0.007	4/18/2000 16:50	18				
Uptake	PE	1547553	m	10	0.007	4/18/2000 13:40					
Uptake	SE	838272	f	10	0.007	4/18/2000 12:00	2.1				
Uptake	EA	921886	f	12	0.007	5/2/2000 12:30	0.68				
Uptake	LB	1083480	f-h	13	0.007	2/18/2000 14:40					
Uptake	LR	1144761	f	13	0.007	5/9/2000 15:40	2.2				

Event:					EV4	EV4	EV5	EV5	EV6	EV6	EV7	EV7
Study Day:					SD6		SD7		SD7		SD7	
Day Designation:					E1		E2		E2		E2	
Study Version	Subject ID	Medical Record #	Sex	Set/Group	Blood-4p/ Thy. func.	Result	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result	Blood-5p/ Thy. func.	Result
Main	AN	1500355	f	1	2/22/2000 15:45	5.8	2/23/2000 8:20	3	2/23/2000 12:00	2	2/23/2000 19:26	2.2
Main	DR	1514852	m	2	2/29/2000 16:00	1.7	3/1/2000 8:45	2	3/1/2000 12:20	1.4	3/1/2000 16:50	1.1
Main	JS1	1535381	m	3	3/7/2000 16:00	0.8	3/8/2000 8:00	0.93	3/8/2000 11:55	1.1	3/8/2000 18:19	
Main	CW	1435544	f	4	3/14/2000 16:05	2.1	3/15/2000 8:10	2.5	3/15/2000 12:23	2.1	3/15/2000 16:55	1.8
Main	TO	1535981	m	5	3/21/2000 15:55	3.1	3/22/2000 8:25	2.3	3/22/2000 12:00	2.7	3/22/2000 17:00	2.4
Main	MA	352747	m	6	3/28/2000 16:00	4.6	3/29/2000 8:15	2.6	3/29/2000 12:00	1.3	3/29/2000 18:25	2.4
Main	AB1	1417419	f	7	4/4/2000 16:00	1.1	4/5/2000 8:20	1.9	4/5/2000 12:10	0.89	4/5/2000 17:00	1
Main	RC	989288	f	8	4/11/2000 16:00	2.1	4/12/2000 7:50	3.9	4/12/2000 12:05		4/12/2000 17:20	3.3
Uptake	BR	1390262	f	11								
Uptake	NA	1111042	m	12								
Main	RT	1406720	f-h	1	2/22/2000 16:10		2/23/2000 8:10	1.9	2/23/2000 11:55	1.7	2/23/2000 16:05	1.9
Main	NR	1535899	m	3	3/7/2000 16:00	2	3/8/2000 8:05	2.1	3/8/2000 11:50	2.1	3/8/2000 17:00	2.1
Main	KN	843833	m	4	3/14/2000 15:45	1.2	3/15/2000 8:00	1.2	3/15/2000 11:45	1.2	3/15/2000 17:19	1.4
Main	JF	1192495	f	5	3/21/2000 15:50	1.8	3/22/2000 8:00	1.7	NT		3/22/2000 17:15	1.7
Main	RB1	1539737	m	6	3/28/2000 15:52	2.2	3/29/2000 7:45	1.7	3/29/2000 12:00	2	3/29/2000 17:15	2
Main	AH	1367467	f	7	4/4/2000 15:45	1.8	4/5/2000 8:05	1.9	4/5/2000 12:10	1.4	4/5/2000 16:50	1.5
Main	SG	263627	f	8	4/11/2000 16:00	1.1	4/12/2000 8:15	1.2	4/12/2000 12:00	0.89	4/12/2000 16:55	0.97
S. Main	AB2	1455926	m	9	4/18/2000 16:00	0.99	4/19/2000 8:45	1.2	4/19/2000 12:30	0.81	4/19/2000 16:35	0.83
Uptake	VM	1546871	f-h	11								
Uptake	SD1	1541591	m	12								
S. Main	SV	501835	f-h	1	2/22/2000 15:45	1.5	2/23/2000 8:05	1.9	2/23/2000 13:00	1.2	2/23/2000 15:45	1.1
Main	CB	1534738	f	2	2/29/2000 15:45	1.8	NT		3/1/2000 12:00	1.9	3/1/2000 15:45	1.6
Main	QY	1153603	m	3	3/7/2000 16:00	0.57	3/8/2000 8:10	0.82	3/8/2000 12:00	0.74	3/8/2000 17:30	0.65
Main	DH	669695	m	4	3/14/2000 15:50		3/14/2000 8:10	3.7	3/14/2000 11:50	2.3	3/16/2000 16:45	2.8
Main	JS2	1369111	m	5	3/21/2000 15:52	1.5	3/22/2000 8:30	1.2	3/22/2000 12:00	0.9	3/22/2000 17:00	1.4
Main	SK	1467881	f	6	3/28/2000 15:50	2.8	3/29/2000 8:05	3.1	3/29/2000 12:00	2.3	3/29/2000 16:45	2.4
Main	DC	1161402	f	8	4/11/2000 16:00	1.8	4/12/2000 8:20	2.1	4/12/2000 12:10	1.8	4/12/2000 17:00	2.2
S. Main	GB	776140	m	9	4/18/2000 16:00	2.1	4/19/2000 8:05	4	4/19/2000 11:45	2.2	4/19/2000 16:50	4.6
Uptake	GH	638333	f-h	11								
Uptake	SD2	1523446	m	13								
S. Uptake	RB2	842597	f	9								
Uptake	MJ	213870	f	10								
Uptake	PE	1547553	m	10								
Uptake	SE	838272	f	10								
Uptake	EA	921886	f	12								
Uptake	LB	1083480	f-h	13								
Uptake	LR	1144761	f	13								

Event:					EV8	EV8	EV9	EV9	EV10	EV10	EV11	EV11
Study Day:					SD8		SD9		SD9		SD13	
Day Designation:					E3		E4		E4		E8	
Study Version	Subject ID	Medical Record #	Sex	Set/Group	Blood-9a/ Thy. func.	Result	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result	Blood-9-11a/ Thy. func.	Result
Main	AN	1500355	f	1	2/24/2000 9:10	2	2/25/2000 8:16	3	2/25/2000 13:14	1.6	2/29/2000 11:25	2.7
Main	DR	1514852	m	2	3/2/2000 9:10	1.3	NT		3/3/2000 12:13	1.2	3/7/2000 9:10	0.82
Main	JS1	1535381	m	3	3/9/2000 9:00	0.74	3/10/2000 7:55	0.86	3/10/2000 11:55	0.94	3/14/2000 9:20	0.75
Main	CW	1435544	f	4	3/16/2000 9:00	1.9	3/17/2000 8:00	3.4	3/17/2000 12:05	3	3/21/2000 9:20	1.6
Main	TO	1535981	m	5	3/23/2000 9:15	2.3	3/24/2000 8:10	2.5	3/24/2000 12:00	3.7	3/28/2000 9:50	2.2
Main	MA	352747	m	6	3/30/2000 9:40	2	3/31/2000 7:50	1.9	3/31/2000 11:45	1.6	4/4/2000 10:55	2.1
Main	AB1	1417419	f	7	4/6/2000 8:40	1.8	4/7/2000 8:15	1.8	4/7/2000 11:45	1.1	4/11/2000 8:15	1.8
Main	RC	989288	f	8	4/13/2000 9:20	2.5	4/14/2000 8:00	2.9	4/14/2000 12:05	1.7	4/18/2000 10:40	1.5
Uptake	BR	1390262	f	11								
Uptake	NA	1111042	m	12								
Main	RT	1406720	f-h	1	2/24/2000 8:00	1.6	2/25/2000 7:55	1.3	2/25/2000 12:05	1.2	2/29/2000 9:30	1.9
Main	NR	1535899	m	3	3/9/2000 8:55	1.4	3/10/2000 7:59	1.5	3/10/2000 11:50	1.6	3/14/2000 10:50	1.9
Main	KN	843833	m	4	3/16/2000 8:25	0.85	3/17/2000 8:00	0.97	3/17/2000 11:45	1.4	3/21/2000 8:25	1.3
Main	JF	1192495	f	5	3/23/2000 8:45	1.4	3/24/2000 8:20	1.7	3/24/2000 11:40	1.3	3/28/2000 15:49	2
Main	RB1	1539737	m	6	3/30/2000 9:15	1.5	3/31/2000 8:10	1.1	3/31/2000 12:05	1.1	4/4/2000 10:55	1.5
Main	AH	1367467	f	7	4/6/2000 9:00	1.3	4/7/2000 8:00	1.5	4/7/2000 12:00	1	4/11/2000 9:00	1.7
Main	SG	263627	f	8	4/13/2000 9:00	0.84	4/14/2000 8:25	2.2	4/14/2000 12:00	1.1	4/18/2000 9:50	0.93
S. Main	AB2	1455926	m	9	4/20/2000 8:55	0.97	4/21/2000 7:45	1	4/21/2000 11:45	0.95	4/25/2000 9:10	0.95
Uptake	VM	1546871	f-h	11								
Uptake	SD1	1541591	m	12								
S. Main	SV	501835	f-h	1	2/24/2000 8:10	1.3	2/25/2000 8:10	1.1	2/25/2000 11:55	0.81	2/29/2000 9:35	1.1
Main	CB	1534738	f	2	3/2/2000 9:30	2	3/3/2000 8:00	2.5	3/3/2000 11:45	1.6	3/7/2000 8:15	1.5
Main	QY	1153603	m	3	3/9/2000 9:30	0.8	3/10/2000 8:20	0.82	3/10/2000 12:05	0.86	3/14/2000 14:50	0.41
Main	DH	669695	m	4	3/16/2000 9:20	1.8	3/17/2000 8:18	2.9	3/17/2000 12:00	2.8	3/21/2000 10:10	2.6
Main	JS2	1369111	m	5	3/23/2000 8:45	1.3	3/24/2000 8:05	1.2	3/24/2000 12:00	1.1	3/28/2000 9:50	1.2
Main	SK	1467881	f	6	3/30/2000 8:45	2.3	3/31/2000 7:55	3	3/31/2000 12:05	2.4	4/4/2000 10:45	2.6
Main	DC	1161402	f	8	4/13/2000 9:00	2.1	4/14/2000 7:50	2.4	4/14/2000 11:55	2	4/18/2000 9:35	2.7
S. Main	GB	776140	m	9	4/20/2000 9:20	3.4	4/21/2000 8:50	3.1	4/21/2000 7:45	3.3	4/25/2000 9:55	3.1
Uptake	GH	638333	f-h	11								
Uptake	SD2	1523446	m	13								
S. Uptake	RB2	842597	f	9								
Uptake	MJ	213870	f	10								
Uptake	PE	1547553	m	10								
Uptake	SE	838272	f	10								
Uptake	EA	921886	f	12								
Uptake	LB	1083480	f-h	13								
Uptake	LR	1144761	f	13								

Event:					EV12	EV12	EV13	EV13	EV14	EV14	EV15	EV15
Study Day:					SD19/SD20		SD19/SD20		SD19/SD20		SD20/SD21	
Day Designation:					E14/E15		E14/E15		E14/E15		P1	
Study Version	Subject ID	Medical Record #	Sex	Set/Group	Blood-8a/ Thy. func.	Result	Blood-12p/ Thy. func.	Result	Blood-5p/ Thy. func.	Result	Blood-9a/ Thy. func.	Result
Main	AN	1500355	f	1	3/6/2000 8:20	3.8	3/6/2000 11:45	2.1	3/6/2000 16:00		3/7/2000 9:15	2.8
Main	DR	1514852	m	2	3/13/2000 9:00	0.77	3/13/2000 12:05	0.71	3/13/2000 17:00	0.59	3/14/2000 8:40	0.96
Main	JS1	1535381	m	3	3/20/2000 8:20	0.81	3/20/2000 11:55	0.77	3/20/2000 16:55	0.68	3/21/2000 9:00	0.63
Main	CW	1435544	f	4	3/27/2000 12:32	2.2	3/27/2000 12:00	1.6	3/27/2000 17:00	1.4	3/28/2000 8:55	1.6
Main	TO	1535981	m	5	4/3/2000 8:10	2.4	4/3/2000 12:05	3.2	4/3/2000 16:55	2	4/4/2000 9:10	1.9
Main	MA	352747	m	6	4/10/2000 8:00	2.1	4/10/2000 11:45	3	4/10/2000 18:05	3.1	4/11/2000 9:35	1.5
Main	AB1	1417419	f	7	4/17/2000 8:00	0.99	4/17/2000 12:00	0.67	4/17/2000 16:50	0.78	4/18/2000 8:45	1.1
Main	RC	989288	f	8	4/24/2000 7:55	2.1	4/24/2000 11:45	1.1	4/24/2000 16:45	1.7	4/25/2000 8:00	2.3
Uptake	BR	1390262	f	11	5/15/2000 8:10	0.56						
Uptake	NA	1111042	m	12	5/22/2000 8:00	4.1						
Main	RT	1406720	f-h	1	3/6/2000 8:05	1.8	3/6/2000 11:45	2.6	3/6/2000 16:00		3/7/2000 9:05	2.4
Main	NR	1535899	m	3	3/20/2000 8:00	1.2	3/20/2000 11:45	1.6	3/20/2000 16:50	1.3	3/21/2000 9:05	1.5
Main	KN	843833	m	4	3/27/2000 11:00		3/27/2000 11:45	1	3/27/2000 16:30	1.1	3/28/2000 9:23	1
Main	JF	1192495	f	5	4/3/2000 7:50	1.7	4/3/2000 11:45	0.98	4/3/2000 16:45	1.1	4/4/2000 8:55	2
Main	RB1	1539737	m	6	4/10/2000 7:50	1.2	4/10/2000 12:05	1.4	4/10/2000 17:00	1.1	4/11/2000 8:35	1
Main	AH	1367467	f	7	4/17/2000 8:00	3.5	4/17/2000 12:00	2.5	4/17/2000 17:00	2.2	4/18/2000 8:45	1.9
Main	SG	263627	f	8	4/24/2000 8:15	1.5	4/24/2000 15:37	1.7	4/24/2000 17:37	1.3	4/25/2000 9:19	0.96
S. Main	AB2	1455926	m	9	5/2/2000 8:40	1.2	5/2/2000 12:05	1	5/2/2000 17:20	1.1	5/3/2000 9:10	1.1
Uptake	VM	1546871	f-h	11	5/15/2000 8:25	7.9						
Uptake	SD1	1541591	m	12	5/22/2000 11:20	1.5						
S. Main	SV	501835	f-h	1	3/7/2000 8:20		3/7/2000 11:45	1	3/7/2000 17:00	1.3	3/8/2000 9:40	1.2
Main	CB	1534738	f	2	3/13/2000 8:05	1.3	3/13/2000 11:55	1.1	3/13/2000 16:55	1.6	3/14/2000 10:24	1.2
Main	QY	1153603	m	3	3/20/2000 8:15	0.57	3/20/2000 12:00	0.53	3/20/2000 17:00	0.66	3/21/2000 9:05	0.41
Main	DH	669695	m	4	3/27/2000 12:37	2.8	3/27/2000 12:07	2.4	3/27/2000 17:05	3.9	3/28/2000 9:10	2.7
Main	JS2	1369111	m	5	4/3/2000 8:20	1.8	4/3/2000 11:55	1.5	4/3/2000 17:00	1.4	4/4/2000 9:10	0.94
Main	SK	1467881	f	6	4/10/2000 8:00	2.4	4/10/2000 12:00	1.9	4/10/2000 16:45	2.1	4/11/2000 8:55	3
Main	DC	1161402	f	8	4/24/2000 8:10	2.6	4/24/2000 11:45	2.2	4/24/2000 16:40	2.7	4/25/2000 8:45	2.4
S. Main	GB	776140	m	9	5/2/2000 8:25	3	5/2/2000 12:10	1.5	5/2/2000 16:45	3.6	5/3/2000 9:05	2.3
Uptake	GH	638333	f-h	11	5/15/2000 7:57	1.2						
Uptake	SD2	1523446	m	13	5/30/2000 8:00	3.8						
S. Uptake	RB2	842597	f	9	5/1/2000 8:40	2.2						
Uptake	MJ	213870	f	10	5/8/2000 9:00	15						
Uptake	PE	1547553	m	10	5/8/2000 8:15	1.5						
Uptake	SE	838272	f	10	5/8/2000 8:30	4.9						
Uptake	EA	921886	f	12	5/22/2000 8:00	0.82						
Uptake	LB	1083480	f-h	13	5/30/2000 8:55	2.1						
Uptake	LR	1144761	f	13	5/31/2000 8:00	2.3						

Event:					EV16	EV16
Study Day:					SD34/SD35	
Day Designation:					P15	
Study Version	Subject ID	Medical Record #	Sex	Set/Group	Blood-8a/ Thy. func.	Result
Main	AN	1500355	f	1	3/21/2000 8:35	4 Combined Data Base (CDB) data column.
Main	DR	1514852	m	2	3/28/2000 9:05	1.5 From Nonmatched CDB file.
Main	JS1	1535381	m	3	4/4/2000 8:10	1.4 <del>1.4</del> From Matched CDB file, corrected location.
Main	CW	1435544	f	4	4/11/2000 8:00	3.7 Duplicate in Aaron file; therefore excluded from CDB.
Main	TO	1535981	m	5	4/18/2000 8:00	3.1
Main	MA	352747	m	6	4/25/2000 8:05	3.1
Main	AB1	1417419	f	7	5/2/2000 8:00	2.1
Main	RC	989288	f	8	5/9/2000 8:00	5.3
Uptake	BR	1390262	f	11		
Uptake	NA	1111042	m	12		
Main	RT	1406720	f-h	1	3/21/2000 8:20	2.9
Main	NR	1535899	m	3	4/4/2000 8:05	1.2
Main	KN	843833	m	4	4/11/2000 8:00	1.2
Main	JF	1192495	f	5	4/18/2000 8:05	2.5
Main	RB1	1539737	m	6	4/25/2000 8:10	1.6
Main	AH	1367467	f	7	5/2/2000 8:15	1.9
Main	SG	263627	f	8	5/9/2000 8:40	1.6
S. Main	AB2	1455926	m	9	5/16/2000 9:40	1.2
Uptake	VM	1546871	f-h	11		
Uptake	SD1	1541591	m	12		
S. Main	SV	501835	f-h	1	3/22/2000 8:15	1.4
Main	CB	1534738	f	2	3/28/2000 8:20	1.9
Main	QY	1153603	m	3	4/4/2000 8:40	0.95
Main	DH	669695	m	4	4/11/2000 8:25	2.5
Main	JS2	1369111	m	5	4/18/2000 8:10	1.5
Main	SK	1467881	f	6	4/25/2000 8:05	2.9
Main	DC	1161402	f	8	5/9/2000 8:10	1.1
S. Main	GB	776140	m	9	5/17/2000 8:30	3.9
Uptake	GH	638333	f-h	11		
Uptake	SD2	1523446	m	13		
S. Uptake	RB2	842597	f	9		
Uptake	MJ	213870	f	10		
Uptake	PE	1547553	m	10		
Uptake	SE	838272	f	10		
Uptake	EA	921886	f	12		
Uptake	LB	1083480	f-h	13		
Uptake	LR	1144761	f	13		

**Attachment 7**

**Radioiodide Uptake Measurements from Greer's Study**

## Att7-Radioiodide Uptake Measurement from Greer's Study

## Thyroid I-123 Uptake (fraction of ingested I-123 as measured in cpm)

Dose (mg/kg-d)	Set	Subject	Age	Sex	Wt. (kg)	Baseline (BL)		Exposure Day 21		Exposure Day 14		Post-Exposure Day 15		Notes					
						8-hr	24-hr	8-hr (% of BL)	24-hr (% of BL)	8-hr (% of BL)	24-hr (% of BL)	8-hr (% of BL)	24-hr (% of BL)						
0.50	1	an	22	f	72.0	0.133	0.215	0.049	36.8%	0.079	36.7%	0.045	33.8%	0.072	33.5%	0.101	75.9%	0.178	82.8%
0.50	2	dr	23	m	72.6	0.111	0.204	0.032	28.8%	0.052	25.5%	0.025	22.5%	0.034	16.7%	0.125	112.6%	0.208	102.0%
0.50	3	js1	26	m	68.2	0.176	0.278	0.048	27.3%	0.068	24.5%	0.078	44.3%	0.123	44.2%	0.204	115.9%	0.322	115.8%
0.50	4	cw	45	f	100.5	0.168	0.250	0.034	20.2%	0.056	22.4%	0.040	23.8%	0.058	23.2%	0.145	86.3%	0.208	83.2%
0.50	5	to	23	m	81.5	0.236	0.328	0.055	23.3%	0.084	25.6%	0.053	22.5%	0.088	26.8%	0.146	61.9%	0.216	65.9%
0.50	6	ma	34	m	84.3	0.089	0.137	0.030	33.7%	0.042	30.7%	0.025	28.1%	0.037	27.0%	0.130	146.1%	0.207	151.1%
0.50	7	ab1	26	f	54.2	0.138	0.194	0.063	45.7%	0.084	43.3%	0.063	45.7%	0.099	51.0%	0.210	152.2%	0.302	155.7%
0.50	8	rc	43	f	63.2	0.106	0.152	0.039	36.8%	0.055	36.2%	0.048	45.3%	0.074	48.7%	0.117	110.4%	0.165	108.6%
0.50	11	br	33	f	98.3	0.161	0.257					0.033	20.5%	0.052	20.2%			0.253	98.4%
0.50	12	na	32	m	75.0	0.096	0.140					0.038	39.6%	0.053	37.9%			0.115	82.1%
0.10	1	rt	53	f	74.6	0.123	0.194	0.070	56.9%	0.103	52.8%	0.060	48.8%	0.091	46.9%	0.124	100.8%	0.187	96.4%
0.10	3	nr	23	m	70.0	0.156	0.207	0.102	65.4%	0.169	81.6%	0.067	42.9%	0.104	50.2%	0.163	104.5%	0.247	119.3%
0.10	4	kn	49	m	75.0	0.073	0.112	0.037	50.7%	0.057	50.9%	0.045	61.6%	0.067	59.8%	0.070	95.9%	0.108	96.4%
0.10	5	jf	44	f	67.5	0.156	0.241	0.093	59.6%	0.138	57.3%	0.075	48.1%	0.113	46.9%	0.171	109.6%	0.247	102.5%
0.10	6	rb1	26	m	84.0	0.130	0.200	0.080	61.5%	0.119	59.5%	0.045	34.6%	0.078	39.0%	0.078	60.0%	0.139	69.5%
0.10	7	ah	25	f	65.9	0.220	0.329	0.127	57.7%	0.187	56.8%	0.170	77.3%	0.236	71.7%	0.210	95.5%	0.296	90.0%
0.10	8	sg	52	f	106.0	0.056	0.098	0.031	55.4%	0.051	52.0%	0.040	71.4%	0.066	67.3%	0.075	133.9%	0.102	104.1%
0.10	9	ab2	24	m	86.4	0.112	0.188	0.076	67.9%	0.117	62.2%	0.086	76.8%	0.141	75.0%	0.143	127.7%	0.237	126.1%
0.10	11	vm	45	f	84.2	0.152	0.252					0.074	48.7%	0.117	46.4%			0.226	89.7%
0.10	12	sd1	26	m	72.7	0.099	0.169					0.084	49.7%			0.290	171.6%	b	
0.02	1	sv	49	f	67.0	0.127	0.230	0.146	115.0%	0.226	98.3%	0.086	67.7%	0.183	79.6%	0.139	109.4%	0.241	104.8%
0.02	2	cb	34	f	72.7	0.152	0.201	0.116	76.3%	0.160	79.6%	0.142	93.4%	0.206	102.5%	0.146	96.1%	0.201	100.0%
0.02	3	qy	57	m	66.0	0.090	0.135	0.098	108.9%	0.142	105.2%	0.089	98.9%	0.133	98.5%	0.138	153.3%	0.187	138.5%
0.02	4	dh	56	m	90.9	0.136	0.185	0.106	77.9%	0.182	98.4%	0.104	76.5%	0.154	83.2%	0.108	79.4%	0.185	100.0%
0.02	5	js2	26	m	106.3	0.143	0.208	0.100	69.9%	0.128	61.5%	0.102	71.3%	0.168	80.8%	0.162	113.3%	0.223	107.2%
0.02	6	sk	49	f	61.2	0.160	0.233	0.122	76.3%	0.185	79.4%	0.115	71.9%	0.190	81.5%	0.192	120.0%	0.264	113.3%
0.02	8	dc	52	f	79.8	0.086	0.187	0.059	68.6%	0.130	69.5%	0.068	79.1%	0.114	61.0%	0.081	94.2%	0.138	73.8%
0.02	9	gb	45	m	86.2	0.090	0.143	0.070	77.8%	0.101	70.6%	0.090	100.0%	0.127	88.8%	0.115	127.8%	0.162	113.3%
0.02	11	gh	55	f	62.1	0.068	0.120					0.064	94.1%	0.111	92.5%			0.137	114.2%
0.02	13	sd2	30	m	65.8	0.125	0.201					0.082	65.6%	0.136	67.7%			0.176	87.6%
0.007	9	rb2	41	f	82.8	0.082	0.122					0.087	106.1%	0.132	108.2%			0.139	113.9%
0.007	10	pe	18	m	79.6	0.130	0.215					0.128	98.5%	0.187	87.0%			0.207	96.3%
0.007	10	mj	49	f	56.8	0.068	0.100					0.087	127.9%	0.139	139.0%			0.145	145.0%
0.007	10	se	40	f	111.4	0.076	0.127					0.080	105.3%	0.135	106.3%			0.114	89.8%
0.007	12	ea	34	f	58.2	0.166	0.220					0.102	61.4%	0.178	80.9%			0.195	88.6%
0.007	13	lb	46	f	57.9	0.254	0.337					0.163	64.2%	0.247	73.3%			0.296	87.8%
0.007	13	lr	46	f	65.9	0.105	0.145					0.098	93.3%	0.134	92.4%			0.117	80.7%

## Notes

- a Subjects AB2, GB, RB2, and SV were exposed to perchlorate for 15 days (AB2, GB, and RB2 because the radiiodine did not arrive on Exposure Day 14, SV because she was out of town). Their "Exposure Day 14" uptake was actually on Exposure Day 15.
- b Subject SD1 did not present himself for his 8-hr uptake on Exposure Day 14.
- c "Post-Exposure Day 15" uptake for subject PE was actually on Post-Exposure Day 22, as he was out of town until then.
- d "Post-Exposure Day 15" uptake for subject EA was actually on Post-Exposure Day 16, as she was out of town until then.
- e Corrected Post-Exposure Day 15 Uptake for subject DC, 8/16/00

**Attachment 8**

**AFRL/HEST Serum and Urine Perchlorate Results from Greer's Study**

Serum Perchlorate Data= 0.5 mg/kg/d

<b>Subject</b>	<b>AN</b>				
<b>Body Weight (kg)</b>	<b>72</b>				
<b>Sex</b>	<b>F</b>				
<b>Age</b>	<b>22</b>				
<b>Dose Group (mg/kg-d)</b>	<b>0.5</b>				
<b>Study</b>					
<b>Exposure</b>					
Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
Baseline	8:00	2/17/2000	8:45	AN 1	ND
ExpD1	12:00	2/22/2000	12:10	AN 2	320.2670
ExpD1	16:00	2/22/2000	15:45	AN 3	397.0479
ExpD2	8:00	2/23/2000	8:20	AN 4	280.9524
ExpD2	12:00	2/23/2000	12:00	AN 5	446.1943
ExpD2	17:00	2/23/2000	17:15	AN 6	842.5234
ExpD3	8:00	2/24/2000	9:00	AN 7	531.0358
ExpD4	8:00	2/25/2000	8:16	AN 8	322.8469
ExpD4	12:00	2/25/2000	12:20	AN 9	436.9144
ExpD8	8:00	2/29/2000	N/A	AN 10	346.8361
ExpD14	8:00	3/6/2000	8:15	AN 11	365.3960
ExpD14	12:00	3/6/2000	11:45	AN 12	601.1167
ExpD14	17:00	3/6/2000	16:00	AN 13	808.2018
PExpD1	8:00	3/7/2000	9:15	AN 14	266.9362
PExpD1	12:00	3/7/2000	12:00	AN 15	186.5614
PExpD1	17:00	3/7/2000	17:00	AN 16	82.6595
PExpD2	8:00	3/8/2000	8:30	AN 17	18.5855
PExpD2	17:00	3/8/2000	17:00	AN 18	ND
PExpD3	8:00	3/9/2000	8:25	AN 19	ND
PExpD3	17:00	3/9/2000	17:00	AN 20	ND
PExpD4	8:00	3/10/2000	8:15	AN 21	ND
PExpD15	8:00	3/21/2000	8:35	AN 22	ND

<b>Subject</b>	<b>DR</b>				
<b>Body Weight (kg)</b>	<b>72.6</b>				
<b>Sex</b>	<b>M</b>				
<b>Age</b>	<b>23</b>				
<b>Dose Group (mg/kg-d)</b>	<b>0.5</b>				
<b>Study</b>					
<b>Exposure</b>					
Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
Baseline	8:00	2/24/2000	8:30	DR2	ND
ExpD1	12:00	2/29/2000	12:00	DR3	207.437
ExpD1	16:00	2/29/2000	16:00	DR4	544.951
ExpD2	8:00	3/1/2000	8:45	DR5	447.243
ExpD2	12:00	3/1/2000	12:20	DR6	709.041
ExpD2	17:00	3/1/2000	16:50	DR7	850.860
ExpD3	8:00	3/2/2000	9:10	DR8	830.893
ExpD4	8:00	3/3/2000	8:15	DR9	571.298
ExpD4	12:00	3/3/2000	12:13	DR10	756.539
ExpD8	8:00	3/7/2000	9:10	DR11	495.581
ExpD14	8:00	3/13/2000	9:00	DR12	739.526
ExpD14	12:00	3/13/2000	12:05	DR13	661.518
ExpD14	17:00	3/13/2000	17:00	DR14	1121.813
PExpD1	8:00	3/14/2000	8:40	DR15	402.610
PExpD1	12:00	3/14/2000	12:00	DR16	312.110

Serum Perchlorate Data= 0.5 mg/kg/d

Study Exposure		Concentration			
Day	Study Time	Actual Date	Actual Time	Sample	(ppb)
PExpD1	17:00	3/14/2000	16:50	DR17	175.780
PExpD2	8:00	3/15/2000	8:50	DR18	65.758
PExpD3	17:00	3/16/2000	9:15	DR19	ND
PExpD3	8:00	3/16/2000	17:00	DR20	ND
PExpD4	17:00	3/17/2000	9:05	DR21	ND
PExpD4	8:00	3/17/2000	17:00	DR22	ND
PExpD16	8:00	3/28/2000	9:05	DR23	ND

**Subject** JS1  
**Body Weight (kg)** 68.2  
**Sex** M  
**Age** 26  
**Dose Group (mg/kg-d)** 0.5

Study Exposure		Concentration			
Day	Study Time	Actual Date	Actual Time	Sample	(ppb)
Baseline	8:00	3/2/2000	8:15	JS 1	ND
ExpD1	12:00	3/7/2000	12:00	JS 2	201.046
ExpD1	16:00	3/7/2000	16:00	JS 3	314.716
ExpD2	8:00	3/8/2000	8:00	JS 4	286.821
ExpD2	12:00	3/8/2000	11:55	JS 5	415.652
ExpD2	17:00	3/8/2000	16:00	JS 6	547.504
ExpD3	8:00	3/9/2000	9:00	JS 7	528.585
ExpD4	8:00	3/10/2000	8:00	JS 8	328.482
ExpD4	12:00	3/10/2000	11:55	JS 9	392.071
ExpD8	8:00	3/14/2000	9:20	JS 10	733.570
ExpD14	8:00	3/20/2000	8:20	JS 11	378.020
ExpD14	12:00	3/20/2000	11:55	JS 12	461.587
ExpD14	17:00	3/20/2000	16:55	JS 13	710.402
PExpD1	8:00	3/21/2000	9:00	JS 14	320.023
PExpD1	12:00	3/21/2000	11:50	JS 15	231.588
PExpD1	17:00	3/21/2000	16:50	JS 16	130.755
PExpD2	8:00	3/22/2000	8:00	JS 17	38.084
PExpD2	17:00	3/22/2000	17:00	JS 18	ND
PExpD3	8:00	3/23/2000	8:15	JS 19	ND
PExpD3	17:00	3/23/2000	17:00	JS 20	ND
PExpD4	8:00	3/24/2000	8:09	JS 21	ND
PExpD16	8:00	4/4/2000	8:10	JS 22	ND

Study Exposure		Concentration			
Day	Study Time	Actual Date	Actual Time	Sample	(ppb)
Baseline	8:00	3/9/2000	8:05	CW 2	ND
ExpD1	12:00	3/14/2000	12:10	CW 3	359.539
ExpD1	16:00	3/14/2000	16:05	CW 4	517.070

Serum Perchlorate Data= 0.5 mg/kg/d

Study Exposure		Concentration			
Day	Study Time	Actual Date	Actual Time	Sample	(ppb)
ExpD2	8:00	3/15/2000	8:10	CW 5	371.976
ExpD2	12:00	3/15/2000	12:23	CW 6	521.927
ExpD2	17:00	3/15/2000	16:55	CW 7	562.504
ExpD3	8:00	3/16/2000	9:00	CW 8	745.798
ExpD4	8:00	3/17/2000	8:00	CW 9	250.349
ExpD4	12:00	3/17/2000	12:05	CW 10	585.059
ExpD8	8:00	3/21/2000	9:20	CW 11	804.269
ExpD14	8:00	3/27/2000	8:00	CW 12	487.695
ExpD14	12:00	3/27/2000	12:00	CW 13	681.015
ExpD14	17:00	3/27/2000	17:00	CW 14	1177.952
PExpD1	8:00	3/28/2000	8:55	CW 15	388.313
PExpD1	12:00	3/28/2000	12:25	CW 16	244.730
PExpD1	17:00	3/28/2000	17:00	CW 17	178.079
PExpD2	8:00	3/29/2000	8:00	CW 18	63.559
PExpD2	17:00	3/29/2000	16:50	CW 19	29.305
PExpD3	8:00	3/30/2000	8:07	CW 20	ND
PExpD3	17:00	3/30/2000	17:00	CW 21	ND
PExpD4	8:00	3/31/2000	8:05	CW 22	ND
PExpD16	8:00	4/11/2000	8:00	CW 23	ND

Subject	TO
Body Weight (kg)	81.5
Sex	M
Age	23
Dose Group (mg/kg-d)	0.5

Study Exposure		Concentration			
Day	Study Time	Actual Date	Actual Time	Sample	(ppb)
Baseline	8:00	3/16/2000	8:07	TO 1	ND
ExpD1	12:00	3/21/2000	12:02	TO 2	351.582
ExpD1	16:00	3/21/2000	15:55	TO 3	514.040
ExpD2	8:00	3/22/2000	8:25	TO 4	351.670
ExpD2	12:00	3/22/2000	12:06	TO 5	599.926
ExpD2	17:00	3/22/2000	17:00	TO 6	992.494
ExpD3	8:00	3/23/2000	9:15	TO 7	886.961
ExpD4	8:00	3/24/2000	8:15	TO 8	314.084
ExpD4	12:00	3/24/2000	12:00	TO 9	605.990
ExpD8	8:00	3/28/2000	9:50	TO 10	816.071
ExpD14	8:00	4/3/2000	8:15	TO 11	542.355
ExpD14	12:00	4/3/2000	12:05	TO 12	711.244
ExpD14	17:00	4/3/2000	16:55	TO 13	1059.323
PExpD1	8:00	4/4/2000	9:10	TO 14	347.947
PExpD1	12:00	4/4/2000	11:55	TO 15	259.750
PExpD1	17:00	4/4/2000	16:50	TO 16	137.586
PExpD2	8:00	4/5/2000	8:00	TO 17	30.714
PExpD2	17:00	4/5/2000	16:50	TO 18	ND
PExpD3	8:00	4/6/2000	8:00	TO 19	ND
PExpD3	17:00	4/6/2000	16:55	TO 20	ND
PExpD4	8:00	4/7/2000	8:05	TO 21	ND
PExpD16	8:00	4/18/2000	8:10	TO 22	ND

Serum Perchlorate Data= 0.5 mg/kg/d

Study Exposure						Concentration (ppb)	
Day	Study Time	Actual Date	Actual Time	Sample			
<b>Subject</b>		MA					
<b>Body Weight (kg)</b>		84.3					
<b>Sex</b>		M					
<b>Age</b>		34					
<b>Dose Group (mg/kg-d)</b>		0.5					
<b>Study Exposure</b>						Concentration (ppb)	
Day	Study Time	Actual Date	Actual Time	Sample			
Baseline	8:00	3/23/2000	9:08	MA 2	ND		
ExpD1	12:00	3/28/2000	12:05	MA 3	329.091		
ExpD1	16:00	3/28/2000	16:00	MA 4	513.706		
ExpD2	8:00	3/29/2000	8:00	MA 5	429.850		
ExpD2	12:00	3/29/2000	12:00	MA 6	652.747		
ExpD2	17:00	3/29/2000	18:25	MA 7	1057.184		
ExpD3	8:00	3/30/2000	9:40	MA 8	951.352		
ExpD4	8:00	3/31/2000	7:50	MA 9	432.406		
ExpD4	12:00	3/31/2000	11:45	MA 10	715.353		
ExpD8	8:00	4/4/2000	10:55	MA 11	678.057		
ExpD14	8:00	4/10/2000	8:00	MA 12	428.086		
ExpD14	12:00	4/10/2000	11:45	MA 13	629.837		
ExpD14	17:00	4/10/2000	18:05	MA 14	865.849		
PExpD1	8:00	4/11/2000	9:35	MA 15	286.126		
PExpD1	12:00	4/11/2000	12:40	MA 16	226.776		
PExpD1	17:00	4/11/2000	17:30	MA 17	122.008		
PExpD2	8:00	4/12/2000	9:10	MA 18	25.063		
PExpD2	17:00	4/12/2000	17:25	MA 19	ND		
PExpD3	8:00	4/13/2000	8:35	MA 20	ND		
PExpD3	17:00	4/13/2000	16:45	MA 21	ND		
PExpD4	8:00	4/14/2000	8:10	MA 22	ND		
PExpD16	8:00	4/25/2000	8:15	MA 23	ND		

Study Exposure						Concentration (ppb)	
Day	Study Time	Actual Date	Actual Time	Sample			
<b>Subject</b>		AB1					
<b>Body Weight (kg)</b>		54.2					
<b>Sex</b>		F					
<b>Age</b>		26					
<b>Dose Group (mg/kg-d)</b>		0.5					
<b>Study Exposure</b>						Concentration (ppb)	
Day	Study Time	Actual Date	Actual Time	Sample			
Baseline	8:00	3/30/2000	8:05	AB 1	ND		
ExpD1	12:00	4/4/2000	12:00	AB 2	229.638		
ExpD1	16:00	4/4/2000	16:00	AB 3	295.707		
ExpD2	8:00	4/5/2000	8:20	AB 4	176.373		
ExpD2	12:00	4/5/2000	12:10	AB 5	291.995		
ExpD2	17:00	4/5/2000	17:00	AB 6	656.337		
ExpD3	8:00	4/6/2000	8:40	AB 7	365.338		
ExpD4	8:00	4/7/2000	8:15	AB 8	186.566		
ExpD4	12:00	4/7/2000	11:45	AB 9	92.160		
ExpD8	8:00	4/11/2000	8:15	AB 10	476.992		

Serum Perchlorate Data= 0.5 mg/kg/d

<b>Study Exposure</b>	<b>Day</b>	<b>Study Time</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Sample</b>	<b>Concentration (ppb)</b>
ExpD14		8:00	4/17/2000	8:00	AB 11	255.725
ExpD14		12:00	4/17/2000	12:00	AB 12	403.317
ExpD14		17:00	4/17/2000	16:50	AB 13	553.129
PExpD1		8:00	4/18/2000	9:00	AB 14	214.824
PExpD1		12:00	4/18/2000	12:00	AB 15	133.839
PExpD1		17:00	4/18/2000	16:50	AB 16	72.999
PExpD2		8:00	4/19/2000	8:00	AB 17	ND
PExpD3		17:00	4/19/2000	16:50	AB 18	ND
PExpD3		8:00	4/20/2000	8:12	AB 19	ND
PExpD4		17:00	4/20/2000	17:00	AB 20	ND
PExpD4		8:00	4/21/2000	8:00	AB 21	ND
PExpD16		8:00	5/2/2000	8:00	AB 22	ND

**Subject** RC  
**Body Weight (kg)** 63.2  
**Sex** F  
**Age** 43  
**Dose Group (mg/kg-d)** 0.5

<b>Study Exposure</b>	<b>Day</b>	<b>Study Time</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Sample</b>	<b>Concentration (ppb)</b>
Baseline		8:00	4/6/2000	8:00	RC 1	ND
ExpD1		12:00	4/11/2000	12:00	RC 2	175.232
ExpD1		16:00	4/11/2000	16:00	RC 3	374.569
ExpD2		8:00	4/12/2000	7:50	RC 4	163.424
ExpD2		12:00	4/12/2000	12:05	RC 5	315.266
ExpD2		17:00	4/12/2000	17:20	RC 6	564.657
ExpD3		8:00	4/13/2000	9:20	RC 7	290.989
ExpD4		8:00	4/14/2000	8:00	RC 8	184.111
ExpD4		12:00	4/14/2000	12:05	RC 9	232.600
ExpD8		8:00	4/18/2000	10:40	RC 10	288.139
ExpD14		8:00	4/24/2000	7:55	RC 11	407.885
ExpD14		12:00	4/24/2000	12:00	RC 12	300.623
ExpD14		17:00	4/24/2000	16:45	RC 13	513.835
PExpD1		8:00	4/25/2000	8:05	RC 14	227.750
PExpD1		12:00	4/25/2000	12:18	RC 15	92.937
PExpD1		17:00	4/25/2000	16:48	RC 16	22.343
PExpD2		8:00	4/26/2000	7:50	RC 17	ND
PExpD2		17:00	4/26/2000	16:35	RC 18	ND
PExpD3		8:00	4/27/2000	8:00	RC 19	ND
PExpD3		17:00	4/27/2000	16:40	RC 20	ND
PExpD4		8:00	4/28/2000	8:05	RC 21	ND
PExpD16		8:00	5/9/2000	8:00	RC 22	ND

Serum Perchlorate Data - 0.1 mg/kg/d

<b>Subject</b>		<b>RT</b>		<b>med-RTserum</b>	
<b>Body Weight (kg)</b>	74.6				
<b>Sex</b>	F				
<b>Age</b>	53				
<b>Dose Group (mg/kg-d)</b>	0.1				
<b>Study</b>					
<b>Exposure</b>					
Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
Baseline	8:00	2/17/2000	8:15	RT 1	ND
ExpD1	12:00	2/22/2000	11:50	RT 2	43.125
ExpD1	16:00	2/22/2000	15:45	RT 3	69.181
ExpD2	8:00	2/23/2000	8:10	RT 4	52.382
ExpD2	12:00	2/23/2000	11:55	RT 5	77.883
ExpD2	17:00	2/23/2000	16:05	RT 6	105.885
ExpD3	8:00	2/24/2000	8:00	RT 7	54.458
ExpD4	8:00	2/25/2000	7:55	RT 8	64.617
ExpD4	12:00	2/25/2000	12:05	RT 9	79.165
ExpD8	8:00	2/29/2000	9:30	RT 10	157.211
ExpD14	8:00	3/6/2000	8:00	RT 11	54.660
ExpD14	12:00	3/6/2000	11:45	RT 12	105.108
ExpD14	17:00	3/6/2000	16:00	RT 13	185.737
PExpD1	8:00	3/7/2000	9:05	RT 14	50.372
PExpD1	12:00	3/7/2000	12:00	RT 15	26.325
PExpD1	17:00	3/7/2000	17:00	RT 16	ND
PExpD2	8:00	3/8/2000	9:15	RT 17	ND
PExpD2	17:00	3/8/2000	17:00	RT 18	ND
PExpD3	8:00	3/9/2000	8:10	RT 19	ND
PExpD3	17:00	3/9/2000	17:10	RT 20	ND
PExpD4	8:00	3/10/2000	8:00	RT 21	ND
PExpD15	8:00	3/21/2000	8:20	RT 22	ND

<b>Subject</b>		<b>NR</b>		<b>med-NRserum</b>	
<b>Body Weight (kg)</b>	70				
<b>Sex</b>	M				
<b>Age</b>	23				
<b>Dose Group (mg/kg-d)</b>	0.1				
<b>Study</b>					
<b>Exposure</b>					
Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
Baseline	8:00	3/2/2000	8:00	NR 1	ND
ExpD1	12:00	3/7/2000	12:10	NR 2	ND
ExpD1	16:00	3/7/2000	16:00	NR 3	ND
ExpD2	8:00	3/8/2000	8:05	NR 4	91.907
ExpD2	12:00	3/8/2000	11:50	NR 5	162.019
ExpD2	17:00	3/8/2000	16:00	NR 6	212.091
ExpD3	8:00	3/9/2000	8:55	NR 7	187.251
ExpD4	8:00	3/10/2000	7:59	NR 8	170.868
ExpD4	12:00	3/10/2000	11:50	NR 9	206.022
ExpD8	8:00	3/14/2000	10:50	NR 10	188.601
ExpD14	8:00	3/20/2000	8:00	NR 11	146.190
ExpD14	12:00	3/20/2000	11:45	NR 12	177.871
ExpD14	17:00	3/20/2000	16:50	NR 13	253.441
PExpD1	8:00	3/21/2000	9:05	NR 14	66.386
PExpD1	12:00	3/21/2000	11:45	NR 15	62.925

Serum Perchlorate Data - 0.1 mg/kg/d

**Study  
Exposure**

Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
PExpD1	17:00	3/21/2000	16:55	NR 16	28.093
PExpD2	8:00	3/22/2000	8:00	NR 17	60.825
PExpD2	17:00	3/22/2000	17:00	NR 18	ND
PExpD3	8:00	3/23/2000	8:00	NR 19	ND
PExpD3	17:00	3/23/2000	16:55	NR 20	ND
PExpD4	8:00	3/24/2000	7:50	NR 21	ND
PExpD15	8:00	4/4/2000	8:05	NR 22	ND

**Subject** KN med-KNserum  
**Body Weight (kg)** 75  
**Sex** M  
**Age** 49  
**Dose Group (mg/kg-d)** 0.1

**Study  
Exposure**

Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
Baseline	8:00	3/9/2000	8:20	KN 1	ND
ExpD1	12:00	3/14/2000	11:43	KN 2	52.510
ExpD1	16:00	3/14/2000	15:45	KN 3	65.042
ExpD2	8:00	3/15/2000	8:00	KN 4	61.335
ExpD2	12:00	3/15/2000	11:45	KN 5	105.327
ExpD2	17:00	3/15/2000	16:45	KN 6	148.410
ExpD3	8:00	3/16/2000	8:25	KN 7	147.637
ExpD4	8:00	3/17/2000	7:45	KN 8	67.902
ExpD4	12:00	3/17/2000	11:45	KN 9	111.157
ExpD8	8:00	3/21/2000	8:25	KN 10	42.347
ExpD14	8:00	3/27/2000	8:10	KN 11	77.501
ExpD14	12:00	3/27/2000	11:25	KN 12	90.819
ExpD14	17:00	3/27/2000	16:30	KN 13	97.398
PExpD1	8:00	3/28/2000	8:35	KN 14	64.097
PExpD1	12:00	3/28/2000	11:45	KN 15	63.017
PExpD1	17:00	3/28/2000	16:35	KN 16	45.219
PExpD2	8:00	3/29/2000	8:00	KN 17	ND
PExpD2	17:00	3/29/2000	16:30	KN 18	ND
PExpD3	8:00	3/30/2000	8:00	KN 19	ND
PExpD3	17:00	3/30/2000	16:35	KN 20	ND
PExpD4	8:00	3/31/2000	NA	KN 21	ND
PExpD15	8:00	4/11/2000	8:00	KN 22	ND

**Subject** JF med-JFserum  
**Body Weight (kg)** 67.5  
**Sex** F  
**Age** 44  
**Dose Group (mg/kg-d)** 0.1

**Study  
Exposure**

Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
Baseline	8:00	3/16/2000	8:15	JF 1	ND
ExpD1	12:00	3/21/2000	11:52	JF 2	48.918
ExpD1	16:00	3/21/2000	15:50	JF 3	91.450

Serum Perchlorate Data - 0.1 mg/kg/d

**Study**

**Exposure**

Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
ExpD14	17:00	4/24/2000	17:37	SG 14	250.244
PExpD1	8:00	4/25/2000	9:15	SG 15	91.354
PExpD1	12:00	4/25/2000	12:00	SG 16	78.321
PExpD1	17:00	4/25/2000	16:45	SG 17	56.432
PExpD2	8:00	4/26/2000	8:15	SG 18	ND
PExpD2	17:00	4/26/2000	16:40	SG 19	ND
PExpD3	8:00	4/27/2000	8:10	SG 20	ND
PExpD3	17:00	4/27/2000	16:35	SG 21	ND
PExpD4	8:00	4/28/2000	8:12	SG 22	ND
PExpD15	8:00	5/9/2000	8:40	SG 23	

**Subject**

AB2

med-AB2serum

**Body Weight (kg)**

86.4

**Sex**

M

**Age**

24

**Dose Group (mg/kg-d)**

0.1

**Study**

**Exposure**

Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
Baseline	8:00	4/13/2000	8:10	AB 1	ND
ExpD1	12:00	4/18/2000	12:10	AB2	41.291
ExpD1	16:00	4/18/2000	16:00	AB 3	73.516
ExpD2	8:00	4/19/2000	8:45	AB 4	80.221
ExpD2	12:00	4/19/2000	12:30	AB 5	111.147
ExpD2	17:00	4/19/2000	16:35	AB 6	133.105
ExpD3	8:00	4/20/2000	8:55	AB 7	169.744
ExpD4	8:00	4/21/2000	8:45	AB 8	87.512
ExpD4	12:00	4/21/2000	12:05	AB 9	110.602
ExpD8	8:00	4/25/2000	9:10	AB 10	134.837
ExpD14	8:00	5/1/2000	8:40	AB 11	81.715
ExpD14	12:00	5/1/2000	12:05	AB 12	63.249
ExpD14	17:00	5/1/2000	17:20	AB 13	93.826
PExpD1	8:00	5/2/2000	9:10	AB 14	118.494
PExpD1	12:00	5/2/2000	12:10	AB 15	59.282
PExpD1	17:00	5/2/2000	17:10	AB 16	47.772
PExpD2	8:00	5/3/2000	8:30	AB 17	ND
PExpD2	17:00	5/3/2000	17:00	AB 18	ND
PExpD3	8:00	5/4/2000	8:40	AB 19	ND
PExpD3	17:00	5/4/2000	16:30	AB 20	ND
PExpD4	8:00	5/5/2000	10:40	AB 21	ND
PExpD16	8:00	5/17/2000	9:40	AB 23	ND

Serum Perchlorate Data - 0.02 mg/kg/d

**SV - not completed**

<b>Subject</b>	<b>CB</b>	low-CB serum			
<b>Body Weight (kg)</b>	<b>72.7</b>				
<b>Sex</b>	<b>F</b>				
<b>Age</b>	<b>34</b>				
<b>Dose Group (mg/kg-d)</b>	<b>0.02</b>				
<b>Study</b>					
<b>Exposure</b>					
Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
Baseline	8:00	2/24/2000	9:00	CB 1	ND
ExpD1	12:00	2/29/2000	11:55	CB 2	ND
ExpD1	16:00	2/29/2000	15:45	CB 3	ND
ExpD2	8:00	3/1/2000	12:00	CB 4	ND
ExpD2	12:00	3/1/2000	15:45	CB 5	ND
ExpD3	17:00	3/2/2000	9:30	CB 6	ND
ExpD4	8:00	3/3/2000	8:00	CB 7	ND
ExpD4	8:00	3/3/2000	11:45	CB 8	ND
ExpD8	12:00	3/7/2000	8:15	CB 9	ND
ExpD14	8:00	3/13/2000	8:05	CB 10	ND
ExpD14	8:00	3/13/2000	11:55	CB 11	ND
ExpD14	12:00	3/13/2000	16:55	CB 12	ND
PExpD1	17:00	3/14/2000	10:24	CB 13	ND
PExpD1	8:00	3/14/2000	12:00	CB 14	ND
PExpD2	12:00	3/15/2000	7:40	CB 15	ND
PExpD2	17:00	3/15/2000	17:00	CB 16	ND
PExpD3	8:00	3/16/2000	7:50	CB 17	ND
PExpD3	17:00	3/16/2000	16:50	CB 18	ND
PExpD3	8:00	3/16/2000	17:00	CB 19	ND
PExpD4	17:00	3/17/2000	8:40	CB 20	ND
PExpD15	8:00	3/28/2000	8:20	CB 21	ND

**QY - not completed**

**DH - not completed**

<b>Subject</b>	<b>JS2</b>	low-JS2 serum			
<b>Body Weight (kg)</b>	<b>106.3</b>				
<b>Sex</b>	<b>M</b>				
<b>Age</b>	<b>26</b>				
<b>Dose Group (mg/kg-d)</b>	<b>0.02</b>				
<b>Study</b>					
<b>Exposure</b>					
Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
Baseline	8:00			JS2 1	ND
ExpD1	12:00			JS2 2	ND
ExpD1	16:00			JS2 3	ND
ExpD2	8:00			JS2 4	ND
ExpD2	12:00			JS2 5	ND
ExpD3	17:00			JS2 6	ND
ExpD4	8:00			JS2 7	ND
ExpD4	8:00			JS2 8	ND

Serum Perchlorate Data - 0.02 mg/kg/d

**Study  
Exposure**

Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
ExpD8		12:00		JS2 9	ND
ExpD14		8:00		JS2 10	ND
ExpD14		8:00		JS2 11	ND
ExpD14		12:00		JS2 12	ND
PExpD1		17:00		JS2 13	65.58740367
PExpD1		8:00		JS2 14	ND
PExpD2		12:00		JS2 15	ND
PExpD2		17:00		JS2 16	ND
PExpD3		8:00		JS2 17	ND
PExpD3		17:00		JS2 18	ND
PExpD3		8:00		JS2 19	ND
PExpD4		17:00		JS2 20	ND
PExpD15		8:00		JS2 21	ND

**Subject** SK  
**Body Weight (kg)** 61.2  
**Sex** f  
**Age** 49  
**Dose Group (mg/kg-d)** 0.02

**Study  
Exposure**

Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
		3/2/2000	1150	SK 1	ND
Baseline	8:00	3/23/2000	815	SK 2	ND
ExpD1	12:00	3/28/2000	1158	SK 3	ND
ExpD1	16:00	3/28/2000	1550	SK 4	ND
ExpD2	8:00	3/29/2000	805	SK 5	ND
ExpD2	12:00	2/29/2000	1200	SK 6	ND
ExpD3	17:00	2/29/2000	1645	SK 7	60.9913
ExpD4	8:00	3/30/2000	845	SK 8	ND
ExpD5	8:00	3/31/2000	755	SK 9	ND
ExpD5	12:00	3/31/2000	1200	SK 10	ND
ExpD8	8:00	4/4/2000	1045	SK 11	ND
ExpD14	8:00	4/10/2000	800	SK 12	ND
ExpD14	12:00	4/10/2000	1200	SK 13	ND
ExpD14	17:00	4/10/2000	1645	SK 14	23.1865
PExpD1	8:00	4/11/2000	855	SK 15	ND
PExpD1	12:00	4/11/2000	1155	SK 16	ND
PExpD1	17:00	4/11/2000	1700	SK 17	58.5834
PExpD2	8:00	4/12/2000	800	SK 18	ND
PExpD2	17:00	4/12/2000	1650	SK 19	ND
PExpD3	8:00	4/13/2000	810	SK 20	ND
PExpD3	17:00	4/13/2000	1640	SK 21	ND
PExpD4	8:00	4/14/2000	800	SK 22	ND

**Subject** JS2  
**Body Weight (kg)** 106.3  
**Sex** M

low-JS2serum

Serum Perchlorate Data - 0.02 mg/kg/d

Study					
Exposure Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
Age			26		
Dose Group (mg/kg-d)			0.02		
Study					
Exposure Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
Baseline	8:00	3/16/2000	8:05	JS2 1	ND
ExpD1	12:00	3/21/2000	12:00	JS2 2	ND
ExpD1	16:00	3/21/2000	15:52	JS2 3	ND
ExpD2	8:00	3/22/2000	8:30	JS2 4	ND
ExpD2	12:00	3/22/2000	12:00	JS2 5	ND
ExpD3	17:00	3/22/2000	17:00	JS2 6	ND
ExpD4	8:00	3/23/2000	8:45	JS2 7	ND
ExpD5	8:00	3/24/2000	8:05	JS2 8	ND
ExpD5	12:00	3/24/2000	12:00	JS2 9	ND
ExpD8	8:00	3/28/2000	9:50	JS2 10	ND
ExpD14	8:00	4/3/2000	8:20	JS2 11	ND
ExpD14	12:00	4/3/2000	11:55	JS2 12	ND
ExpD14	17:00	4/3/2000	17:00	JS2 13	65.5874
PExpD1	8:00	4/4/2000	9:10	JS2 14	ND
PExpD1	12:00	4/4/2000	11:55	JS2 15	ND
PExpD1	17:00	4/4/2000	16:55	JS2 16	ND
PExpD2	8:00	4/5/2000	8:25	JS2 17	ND
PExpD2	17:00	4/5/2000	17:00	JS2 18	ND
PExpD3	8:00	4/6/2000	8:30	JS2 19	ND
PExpD3	17:00	4/6/2000	17:00	JS2 20	ND
PExpD4	8:00	4/7/2000	8:10	JS2 21	ND
PExpD15	8:00	4/18/2000	8:10	JS2 22	ND

Subject		SK			
Body Weight (kg)		61.2			
Sex		f			
Age		49			
Dose Group (mg/kg-d)		0.02			
Study					
Exposure Day	Study Time	Actual Date	Actual Time	Sample	Concentration (ppb)
		3/2/2000	1150	SK 1	ND
Baseline	8:00	3/23/2000	815	SK 2	ND
ExpD1	12:00	3/28/2000	1158	SK 3	ND
ExpD1	16:00	3/28/2000	1550	SK 4	ND
ExpD2	8:00	3/29/2000	805	SK 5	ND
ExpD2	12:00	2/29/2000	1200	SK 6	ND
ExpD3	17:00	2/29/2000	1645	SK 7	60.9913
ExpD4	8:00	3/30/2000	845	SK 8	ND
ExpD5	8:00	3/31/2000	755	SK 9	ND
ExpD5	12:00	3/31/2000	1200	SK 10	ND
ExpD8	8:00	4/4/2000	1045	SK 11	ND
ExpD14	8:00	4/10/2000	800	SK 12	ND

Serum Perchlorate Data - 0.02 mg/kg/d

**Study  
Exposure**

<b>Day</b>	<b>Study Time</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Sample</b>	<b>Concentration (ppb)</b>
ExpD14	12:00	4/10/2000	1200	SK 13	ND
ExpD14	17:00	4/10/2000	1645	SK 14	23.1865
PExpD1	8:00	4/11/2000	855	SK 15	ND
PExpD1	12:00	4/11/2000	1155	SK 16	ND
PExpD1	17:00	4/11/2000	1700	SK 17	58.5834
PExpD2	8:00	4/12/2000	800	SK 18	ND
PExpD2	17:00	4/12/2000	1650	SK 19	ND
PExpD3	8:00	4/13/2000	810	SK 20	ND
PExpD3	17:00	4/13/2000	1640	SK 21	ND
PExpD4	8:00	4/14/2000	800	SK 22	ND
PExpD15	8:00	4/25/2000	805	SK 23	ND

**DC - Not completed**

**GB - Not completed**

Urine Perchlorate Data - 0.5 mg/kg/d

<b>Subject</b>	<b>AN</b>
<b>Body Weight (kg)</b>	<b>72</b>
<b>Sex</b>	<b>F</b>
<b>Age</b>	<b>22</b>
<b>Dose Group (mg/kg-d)</b>	<b>0.5</b>

<b>Study Exposure Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol</b>	<b>Sample</b>	<b>Concentration (ppm)</b>
Baseline	2/17/2000	7:50	230	AN 7	ND
ExpD1	2/22/2000	9:40	420	AN 8	ND
ExpD1	2/22/2000	11:55	330	AN 9	4.410
ExpD1	2/22/2000	15:30	350	AN 10	10.642
ExpD1	2/22/2000	18:30	330	AN 11	11.385
ExpD1	2/22/2000	23:05	130	AN 12	39.387
ExpD2	2/23/2000	7:00	800	AN 13	42.594
ExpD2	2/23/2000	8:30	450	AN 14	5.301
ExpD2	2/23/2000	10:35	434	AN 15	6.708
ExpD2	2/23/2000	16:14	340	AN 16	18.238
ExpD2	2/23/2000	22:05	300	AN 17	33.257
ExpD3	2/24/2000	7:30	380	AN 18	34.325
ExpD3	2/24/2000	8:15	65	AN 19	10.517
ExpD8	2/29/2000	11:45	340	AN 20	12.176
ExpD8	2/29/2000	16:10	210	AN 21	44.773
ExpD8	2/29/2000	18:30	216	AN 22	24.846
ExpD8	2/29/2000	20:15	100	AN 23	26.799
ExpD8	2/29/2000	23:30	760	AN 24	11.66784659
ExpD9	3/1/2000	7:20	595	AN 25	23.16358665
ExpD9	3/1/2000	9:10	700	AN 26	7.153406733
ExpD14	3/6/2000	8:30	230	AN 27	8.858604106
ExpD14	3/6/2000	11:00	320	AN 28	8.639503943
ExpD14	3/6/2000	17:25	220	AN 29	51.61487196
ExpD14	3/6/2000	21:00	190	AN 30	32.08505236
PExpD1	3/7/2000	7:45	490	AN 31	21.42055025
PExpD1	3/7/2000	9:35	410	AN 32	5.107658131
PExpD1	3/7/2000	11:40	330	AN 33	5.283426507
PExpD1	3/7/2000	19:00	120	AN 34	10.56136025
PExpD1	3/7/2000	21:00	90	AN 35	7.944364426
PExpD1	3/7/2000	23:30	100	AN 36	5.277933745
PExpD2	3/8/2000	6:30	690	AN 37	1.642881706
PExpD2	3/8/2000	8:45	450	AN 38	0.427760857
PExpD2	3/8/2000	11:30	320	AN 39	0.839740126
PExpD2	3/8/2000	15:20	380	AN 40	0.624877186
PExpD2	3/8/2000	19:30	330	AN 41	0.961878562
PExpD2	3/8/2000	22:40	270	AN 42	1.029671841
PExpD3	3/9/2000	7:05	550	AN 43	2.02710503
PExpD3	3/9/2000	8:35	400	AN 44	0.243662802
PExpD3	3/9/2000	13:37	400	AN 45	0.474430143
PExpD3	3/9/2000	18:50	220	AN 46	0.786684516
PExpD3	3/9/2000	20:45	170	AN 47	ND
PExpD3	3/9/2000	21:50	380	AN 48	ND
PExpD4	3/10/2000	6:15	980	AN 49	ND
PExpD4	3/10/2000	8:30	400	AN 50	ND
PExpD4	3/10/2000	14:10	270	AN 51	ND
PExpD4	3/10/2000	18:30	110	AN 52	ND
PExpD4	3/10/2000	1:50	600	AN 53	ND
PExpD5	3/11/2000	9:45	900	AN 54	ND

Urine Perchlorate Data - 0.5 mg/kg/d

Study Exposure Day	Actual Date	Actual Time	Vol	Concentration	
				Sample	(ppm)
PExpD14	3/20/2000	9:45	470	AN 55	ND
PExpD14	3/20/2000	13:45	530	AN 56	ND
PExpD14	3/20/2000	17:30	400	AN 57	ND
PExpD14	3/20/2000	19:00	70	AN 58	ND
PExpD15	3/21/2000	0:10	200	AN 59	ND
PExpD15	3/21/2000	7:15	810	AN 60	ND
<b>Subject</b>	DR				
<b>Body Weight (kg)</b>	72.6				
<b>Sex</b>	M				
<b>Age</b>	23				
<b>Dose Group (mg/kg-d)</b>	0.5				
Study Exposure Day	Actual Date	Actual Time	Vols (ml)	Sample	Concentration
					(ppm)
Baseline	2/24/2000	6:40	433	DR 5	ND
ExpD1	2/29/2000	11:18	710	DR 6	1.913
ExpD1	2/29/2000	14:20	600	DR 7	3.446
ExpD1	2/29/2000	17:20	500	DR 8	7.427
ExpD1	2/29/2000	19:30	700	DR 9	4.283
ExpD1	2/29/2000	22:35	340	DR 10	11.284
ExpD2	3/1/2000	0:14	150	DR 11	16.371
ExpD2	3/1/2000	5:00	290	DR 12	3.787
ExpD2	3/1/2000	10:30	1000	DR 13	2.315
ExpD2	3/1/2000	13:00	650	DR 14	5.466
ExpD2	3/1/2000	18:30	440	DR 15	8.767
ExpD2	3/1/2000	20:40	340	DR 16	10.388
ExpD2	3/1/2000	22:30	350	DR 17	11.607
ExpD2	3/1/2000	23:00	220	DR 18	1.614
ExpD3	3/2/2000	3:00	1120	DR 19	5.946
ExpD8	3/7/2000	18:30	930	DR 20	13.725
ExpD8	3/7/2000	21:30	320	DR 21	14.140
ExpD8	3/7/2000	23:30	110	DR 22	20.22160221
ExpD9	3/8/2000	8:00	800	DR 23	9.055224168
ExpD14	3/13/2000	10:15	420	DR 24	7.906163812
ExpD14	3/13/2000	16:30	730	DR 25	13.29837727
ExpD14	3/13/2000	20:15	300	DR 26	15.58142518
PExpD1	3/14/2000	7:45	500	DR 27	13.64120326
PExpD1	3/14/2000	11:00	710	DR 28	5.535244692
PExpD1	3/14/2000	15:00	720	DR 29	3.235520493
PExpD1	3/14/2000	23:30	200	DR 30	4.818805721
PExpD1	3/14/2000	14:50	350	DR 31	5.113206337
PExpD2	3/15/2000	7:00	410	DR 32	2.412930537
PExpD2	3/15/2000	16:30	500	DR 33	1.221858765
PExpD2	3/15/2000	23:20	840	DR 34	0.345576722
PExpD3	3/16/2000	14:00	1000	DR 35	ND
PExpD3	3/16/2000	19:30	500	DR 36	ND
PExpD3	3/16/2000	23:45	670	DR 37	ND
PExpD4	3/17/2000	7:30	390	DR 38	ND
PExpD4	3/17/2000	15:00	400	DR 39	ND
PExpD4	3/17/2000	20:00	1000	DR 40	ND
PExpD5	3/18/2000	0:10	1000	DR 41	ND
PExpD5	3/18/2000	1:30	620	DR 42	ND

Urine Perchlorate Data - 0.5 mg/kg/d

Study Exposure Day	Actual Date	Actual Time	Vol	Concentration	
				Sample	(ppm)
PExpD14	3/27/2000	15:25	600	DR 43	ND
PExpD14	3/27/2000	20:57	380	DR 44	ND
PExpD14	3/27/2000	23:00	340	DR 45	ND
PExpD15	3/28/2000	0:50	800	DR 46	ND

Subject	JS1	high-JS1urine
Body Weight (kg)	68.2	
Sex	M	
Age	26	
Dose Group (mg/kg-d)	0.5	

Study Exposure Day	Actual Date	Actual Time	Vol (ml)	Concentration	
				Sample	(ppm)
Baseline	3/2/2000	5:15	140	JS 5	ND
ExpD1	3/7/2000	11:00	120	JS 6	12.467
ExpD1	3/7/2000	17:00	225	JS 7	26.573
ExpD2	3/8/2000	6:15	290	JS 8	48.485
ExpD2	3/8/2000	11:30	230	JS 9	23.837
ExpD2	3/8/2000	16:40	310	JS 10	20.951
ExpD2	3/8/2000	21:40	120	JS 11	36.125
ExpD3	3/9/2000	6:35	280	JS 12	38.142
ExpD8	3/14/2000	13:40	320	JS 13	25.830
ExpD8	3/14/2000	14:50	30	JS 14	27.820
ExpD8	3/14/2000	20:15	190	JS 15	33.476
ExpD9	3/15/2000	6:30	260	JS 16	45.684
ExpD14	3/20/2000	10:40	400	JS 17	11.626
ExpD14	3/20/2000	13:50	375	JS 18	9.454
ExpD14	3/20/2000	16:30	150	JS 19	27.109
ExpD14	3/20/2000	20:15	120	JS 20	43.543
PExpD1	3/21/2000	5:50	290	JS 21	38.109
PExpD1	3/21/2000	13:50	345	JS 22	14.0048447
PExpD1	3/21/2000	18:05	170	JS 23	8.027940005
PExpD1	3/21/2000	22:20	160	JS 24	5.157950624
PExpD2	3/22/2000	6:00	200	JS 25	3.049153013
PExpD2	3/22/2000	12:55	240	JS 26	1.87378506
PExpD2	3/22/2000	15:45	295	JS 27	0.717161899
PExpD2	3/22/2000	22:45	145	JS 28	ND
PExpD3	3/23/2000	6:30	255	JS 29	ND
PExpD3	3/23/2000	13:35	260	JS 30	ND
PExpD3	3/23/2000	16:30	250	JS 31	ND
PExpD3	3/23/2000	23:40	225	JS 32	ND
PExpD4	3/24/2000	7:00	200	JS 33	ND
PExpD4	3/24/2000	9:40	75	JS 34	ND
PExpD4	3/24/2000	13:05	305	JS 35	ND
PExpD4	3/24/2000	15:15	100	JS 36	ND
PExpD4	3/24/2000	22:20	270	JS 37	ND
PExpD5	3/25/2000	8:00	275	JS 38	ND
PExpD14	4/3/2000	13:50	300	JS 39	ND
PExpD14	4/3/2000	15:20	255	JS 40	ND
PExpD14	4/3/2000	17:30	190	JS 41	ND
PExpD14	4/3/2000	19:30	190	JS 42	ND
PExpD14	4/3/2000	22:20	350	JS 43	ND
PExpD15	4/4/2000	4:00	470	JS 44	ND

Urine Perchlorate Data - 0.5 mg/kg/d

Study Exposure Day	Actual Date	Actual Time	Vol	Sample	Concentration
					(ppm)
PExpD15	4/4/2000	7:05	130	JS 45	ND
<b>Subject</b>	<b>CW</b>				high-CWurine
<b>Body Weight (kg)</b>	<b>100.5</b>				
<b>Sex</b>	<b>F</b>				
<b>Age</b>	<b>45</b>				
<b>Dose Group (mg/kg-d)</b>	<b>0.5</b>				
Study Exposure Day	Actual Date	Actual Time	Vol (ml)	Sample	Concentration
					(ppm)
Baseline	3/9/2000	6:15	200	CW 5	ND
ExpD1	3/14/2000	10:30	155	CW 6	12.210
ExpD1	3/14/2000	15:10	200	CW 7	27.395
ExpD1	3/14/2000	17:20	200	CW 8	0.000
ExpD1	3/14/2000	22:20	410	CW 9	18.428
ExpD2	3/15/2000	3:45	550	CW 10	12.328
ExpD2	3/15/2000	6:00	265	CW 11	13.953
ExpD2	3/15/2000	7:40	55	CW 12	28.769
ExpD2	3/15/2000	13:10	285	CW 13	45.868
ExpD2	3/15/2000	18:20	290	CW 14	32.044
ExpD2	3/15/2000	21:55	420	CW 15	21.902
ExpD2	3/15/2000	23:10	35.5	CW 16	93.048
ExpD3	3/16/2000	1:40	500	CW 17	12.557
ExpD3	3/16/2000	6:20	350	CW 18	22.192
ExpD8	3/21/2000	12:40	155	CW 19	61.858
ExpD8	3/21/2000	19:35	175	CW 20	98.960
ExpD8	3/21/2000	22:30	85	CW 21	104.078
ExpD9	3/22/2000	6:40	335	CW 22	44.8480629
PExpD3	3/30/2000			CW 23	0
ExpD14	3/27/2000	10:55	200	CW 23	41.91866656
ExpD14	3/27/2000	14:20	125	CW 24	54.10393972
ExpD14	3/27/2000	17:25	300	CW 25	24.00278483
ExpD14	3/27/2000	22:10	165	CW 26	50.56802359
PExpD1	3/28/2000	6:05	415	CW 27	41.21918257
PExpD1	3/28/2000	9:10	125	CW 28	27.07756573
PExpD1	3/28/2000	13:45	180	CW 29	22.388402
PExpD1	3/28/2000	17:05	195	CW 30	11.19624867
PExpD1	3/28/2000	20:20	270	CW 31	5.235891555
PExpD2	3/29/2000	0:00	390	CW 32	2.634531903
PExpD2	3/29/2000	3:15	510	CW 33	0.976738472
PExpD2	3/29/2000	6:05	400	CW 34	1.102874928
PExpD2	3/29/2000	12:05	265	CW 35	1.367024326
PExpD2	3/29/2000	15:55	220	CW 36	1.892046851
PExpD2	3/29/2000	19:55	195	CW 37	1.80276845
PExpD2	3/29/2000	23:25	130	CW 38	3.078057171
PExpD3	3/30/2000	5:00	700	CW 39	ND
PExpD3	3/30/2000	6:35	200	CW 40	0.984519617
PExpD3	3/30/2000	13:45	245	CW 41	2.533786551
PExpD3	3/30/2000	16:40	195	CW 42	1.076255222
PExpD3	3/30/2000	19:50	210	CW 43	0.971004996
PExpD3	3/30/2000	22:15	130	CW 44	1.892456385
PExpD4	3/31/2000	6:30	630	CW 45	1.016053731
PExpD4	3/31/2000	9:50	110	CW 46	1.743795561

Urine Perchlorate Data - 0.5 mg/kg/d

Study Exposure Day	Actual Date	Actual Time	Vol	Concentration	
				Sample	(ppm)
PExpD4	3/31/2000	13:50	170	CW 47	0.651978049
PExpD4	3/31/2000	19:05	155	CW 48	1.253583422
PExpD5	4/1/2000	0:05	255	CW 49	0.902203293
PExpD5	4/1/2000	8:00	555	CW 50	ND
PExpD14	4/10/2000	14:00	245	CW 51	ND
PExpD14	4/10/2000	17:05	105	CW 52	ND
PExpD14	4/10/2000	22:20	240	CW 53	ND
PExpD15	4/11/2000	6:10	650	CW 54	ND

Subject	TO	high-TO urine
Body Weight (kg)	81.5	
Sex	M	
Age	23	
Dose Group (mg/kg-d)	0.5	

Study Exposure Day	Actual Date	Actual Time	Vol (mL)	Concentration	
				Sample	(ppm)
Baseline	3/16/2000	7:10	445	TO 5	ND
ExpD1	3/21/2000	8-12 am	40	TO 6	14.538
ExpD1	3/21/2000	12-4 pm	250	TO 7	13.819
ExpD1	3/21/2000	4-8 pm	330	TO 8	23.718
ExpD1	3/21/2000	Bed-8	250	TO 9	26.755
ExpD2	3/22/2000	8-12 am	300	TO 10	15.861
ExpD2	3/22/2000	12-4 pm	298	TO 11	15.694
ExpD2	3/22/2000	4-8 pm	295	TO 12	25.885
ExpD2	3/22/2000	8pm-2am	2750	TO 13	3.330
ExpD3	3/23/2000	2am-8am	650	TO 14	3.517
ExpD8	3/28/2000	8-12 am	135	TO 15	46.029
ExpD8	3/28/2000	12-4 pm	220	TO 16	23.119
ExpD8	3/28/2000	4-8 pm	1500	TO 17	3.600
ExpD8	3/28/2000	8-11 pm	1050	TO 18	2.082
ExpD9	3/29/2000	11pm-8am	345	TO 19	20.774
ExpD14	4/3/2000	8-12 am	435	TO 20	11.602
ExpD14	4/3/2000	12-4 pm	900	TO 21	14.779
ExpD14	4/3/2000	8-12 pm	612	TO 22	9.894020594
PExpD1	4/4/2000	12-8 am	805	TO 23	7.526344313
PExpD1	4/4/2000	8-12 am	280	TO 24	8.924248811
PExpD1	4/4/2000	12-4 pm	450	TO 25	2.355633167
PExpD1	4/4/2000	8-11 pm	1105	TO 26	ND
PExpD2	4/5/2000	11-8 am	500	TO 27	ND
PExpD2	4/5/2000	12-4 pm	280	TO 28	ND
PExpD2	4/5/2000	4-8 pm	195	TO 29	ND
PExpD2	4/5/2000	8-12 pm	190	TO 30	ND
PExpD3	4/6/2000	12-8 am	225	TO 31	ND
PExpD3	4/6/2000	8-12 am	175	TO 32	ND
PExpD3	4/6/2000	12-4 pm	150	TO 33	ND
PExpD3	4/6/2000	8-12 pm	1500	TO 34	ND
PExpD4	4/7/2000	12-8 am	505	TO 35	ND
PExpD4	4/7/2000	8-12 am	175	TO 36	ND
PExpD4	4/7/2000	12-4 pm	195	TO 37	ND
PExpD4	4/7/2000	4-8 pm	270	TO 38	ND
PExpD4	4/7/2000	8-12 pm	2675	TO 39	ND
PExpD14	4/17/2000	8-12 am	190	TO 40	ND

Urine Perchlorate Data - 0.5 mg/kg/d

Study Exposure Day	Actual Date	Actual Time	Vol	Concentration	
				Sample	(ppm)
PExpD14	4/17/2000	12-4 pm	210	TO 41	ND
PExpD14	4/17/2000	8-12 pm	350	TO 42	ND
PExpD15	4/18/2000	12-8 am	605	TO 43	ND

Subject	MA	high-MAurine
Body Weight (kg)	84.3	
Sex	M	
Age	34	
Dose Group (mg/kg-d)	0.5	

Study Exposure Day	Actual Date	Actual Time	Vol (ml)	Concentration	
				Sample	(ppm)
Baseline	3/23/2000	0:00	264	MA 5	ND
ExpD1	3/28/2000	8:00	720	MA 6	3.638
ExpD1	3/28/2000	12:00	687	MA 7	9.486
ExpD1	3/28/2000	16:00	174	MA 8	23.878
ExpD1	3/28/2000	20:00	105	MA 9	56.695
ExpD2	3/29/2000	0:00	395	MA 10	31.794
ExpD2	3/29/2000	8:00	974	MA 11	8.923
ExpD2	3/29/2000	12:00	265	MA 12	27.027
ExpD2	3/29/2000	16:00	386	MA 13	24.038
ExpD2	3/29/2000	20:00	181	MA 14	51.111
ExpD2	3/29/2000	0:00	214	MA 15	39.369
ExpD8	4/4/2000	8:00	598	MA 16	8.059
ExpD8	4/4/2000	12:00	295	MA 17	29.110
ExpD8	4/4/2000	16:00	845	MA 18	8.164
ExpD8	4/4/2000	20:00	670	MA 19	8.959
ExpD9	4/5/2000	0:00	687	MA 20	24.362
ExpD14	4/10/2000	8:00	492	MA 21	18.494
ExpD14	4/10/2000	12:00	441	MA 22	19.8306018
ExpD14	4/10/2000	16:00	328	MA 23	38.47865518
ExpD14	4/10/2000	20:00	142	MA 24	42.32622919
PExpD1	4/11/2000	0:00	264	MA 25	42.28736153
PExpD1	4/11/2000	8:00	137	MA 26	27.66858846
PExpD1	4/11/2000	12:00	230	MA 27	14.34669949
PExpD1	4/11/2000	16:00	675	MA 28	3.810973635
PExpD1	4/11/2000	20:00	483	MA 29	0.809742826
PExpD2	4/12/2000	0:00	459	MA 30	ND
PExpD2	4/12/2000	8:00	774	MA 31	ND
PExpD2	4/12/2000	12:00	350	MA 32	ND
PExpD2	4/12/2000	16:00	310	MA 33	ND
PExpD2	4/12/2000	20:00	136	MA 34	ND
PExpD3	4/13/2000	0:00	191	MA 35	ND
PExpD3	4/13/2000	8:00	89	MA 36	ND
PExpD3	4/13/2000	12:00	193	MA 37	ND
PExpD3	4/13/2000	16:00	650	MA 38	ND
PExpD3	4/13/2000	20:00	575	MA 39	ND
PExpD4	4/14/2000	0:00	487	MA 40	ND
PExpD4	4/14/2000	8:00	762	MA 41	ND
PExpD4	4/14/2000	12:00	158	MA 42	ND
PExpD4	4/14/2000	16:00	510	MA 43	ND
PExpD4	4/14/2000	20:00	425	MA 44	ND
PExpD5	4/15/2000	0:00	484	MA 45	ND

Urine Perchlorate Data - 0.5 mg/kg/d

Study Exposure Day	Actual Date	Actual Time	Vol	Concentration	
				Sample	(ppm)
PExpD14	4/24/2000	8:00	562	MA 46	ND
PExpD14	4/24/2000	12:00	124	MA 47	ND
PExpD14	4/24/2000	16:00	503	MA 48	ND
PExpD14	4/24/2000	20:00	690	MA 49	ND
PExpD15	4/25/2000	0:00	290	MA 50	ND
<b>Subject</b>	<b>AB1</b>				high-AB1urine
<b>Body Weight (kg)</b>	<b>54.2</b>				
<b>Sex</b>	<b>F</b>				
<b>Age</b>	<b>26</b>				
<b>Dose Group (mg/kg-d)</b>	<b>0.5</b>				
Study Exposure Day	Actual Date	Actual Time	Vol (mL)	Sample	Concentration
					(ppm)
Baseline	3/30/2000	22:00	720	AB 5	ND
ExpD1	4/4/2000	8:00	365	AB 6	2.688
ExpD1	4/4/2000	12:00	180	AB 7	21.488
ExpD1	4/4/2000	16:00	190	AB 8	17.411
ExpD1	4/4/2000	20:00	140	AB 9	7.712
ExpD2	4/5/2000	0:00	530	AB 10	14.931
ExpD2	4/5/2000	8:00	430	AB 11	7.552
ExpD2	4/5/2000	12:00	330	AB 12	12.305
ExpD2	4/5/2000	16:00	225	AB 13	18.646
ExpD2	4/5/2000	20:00	390	AB 14	7.990
ExpD3	4/6/2000	0:00	705	AB 15	9.067
ExpD8	4/11/2000	8:00	350	AB 16	6.328
ExpD8	4/11/2000	12:00	210	AB 17	13.524
ExpD8	4/11/2000	16:00	200	AB 18	10.762
ExpD8	4/11/2000	20:00	155	AB 19	14.695
ExpD9	4/12/2000	22:00	1075	AB 20	7.789
ExpD14	4/17/2000	8:00	425	AB 21	3.317
ExpD14	4/17/2000	12:00	365	AB 22	10.91636078
ExpD14	4/17/2000	16:00	410	AB 23	11.8782774
ExpD14	4/17/2000	20:00	385	AB 24	7.252884111
PExpD16	4/18/2000	0:00	640	AB 25	9.391059255
PExpD1	4/18/2000	8:00	455	AB 26	2.146040902
PExpD1	4/18/2000	12:00	680	AB 27	2.341701626
PExpD1	4/18/2000	16:00	570	AB 28	1.020582066
PExpD1	4/18/2000	20:00	320	AB 29	0.4172129
PExpD2	4/19/2000	0:00	565	AB 30	0.573217095
PExpD2	4/19/2000	8:00	510	AB 31	ND
PExpD2	4/19/2000	12:00	495	AB 32	ND
PExpD2	4/19/2000	16:00	310	AB 33	ND
PExpD2	4/19/2000	20:00	90	AB 34	ND
PExpD3	4/20/2000	0:00	620	AB 35	ND
PExpD3	4/20/2000	8:00	265	AB 36	ND
PExpD3	4/20/2000	12:00	215	AB 37	ND
PExpD3	4/20/2000	16:00	485	AB 38	ND
PExpD3	4/20/2000	20:00	200	AB 39	ND
PExpD4	4/21/2000	0:00	675	AB 40	ND
PExpD4	4/21/2000	8:00	370	AB 41	ND
PExpD4	4/21/2000	12:00	420	AB 42	ND
PExpD4	4/21/2000	16:00	580	AB 43	ND

Urine Perchlorate Data - 0.5 mg/kg/d

Study Exposure Day	Actual Date	Actual Time	Vol	Concentration	
				Sample	(ppm)
PExpD4	4/21/2000	20:00	840	AB 44	ND
PExpD5	4/22/2000	0:00	445	AB 45	ND
PExpD14	5/1/2000	8:00	490	AB 46	ND
PExpD14	5/1/2000	12:00	225	AB 47	ND
PExpD14	5/1/2000	16:00	280	AB 48	ND
PExpD14	5/1/2000	20:00	145	AB 49	ND
PExpD15	5/2/2000	0:00	390	AB 50	ND

Subject	RC	high-RCurine
Body Weight (kg)	63.2	
Sex	F	
Age	43	
Dose Group (mg/kg-d)	0.5	

Study Exposure Day	Actual Date	Actual Time	Vol (ml)	Concentration	
				Sample	(ppm)
Baseline	4/6/2000	6:30	460	RC 4	ND
ExpD1	4/11/2000	11:30	136	RC 5	12.900
ExpD1	4/11/2000	15:30	195	RC 6	19.042
ExpD1	4/11/2000	20:00	240	RC 7	14.928
ExpD1	4/11/2000	23:00	260	RC 8	16.088
ExpD2	4/12/2000	8:00	660	RC 9	7.036
ExpD2	4/12/2000	11:40	160	RC 10	22.260
ExpD2	4/12/2000	16:00	312	RC 11	12.428
ExpD2	4/12/2000	19:10	235	RC 12	17.379
ExpD2	4/12/2000	23:00	105	RC 13	52.374
ExpD2	4/12/2000	6:15	310	RC 14	15.110
ExpD8	4/18/2000	12:00	156	RC 15	26.888
ExpD8	4/18/2000	16:00	327	RC 16	19.290
ExpD8	4/18/2000	20:00	420	RC 17	13.015
ExpD8	4/18/2000	23:00	164	RC 18	25.921
ExpD9	4/19/2000	7:59	275	RC 19	16.303
ExpD14	4/24/2000	0800-1200	215	RC 20	26.081
ExpD14	4/24/2000	1200-1555	575	RC 21	8.13312573
ExpD14	4/24/2000	1555-2000	220	RC 22	11.0564422
ExpD14	4/24/2000	2000-2300	238	RC 23	25.17399766
PExpD1	4/25/2000	2300-0645	375	RC 24	11.04593227
PExpD1	4/25/2000	0800-1200	195	RC 25	5.92954457
PExpD1	4/25/2000	1200-1600	287	RC 26	18.43479953
PExpD1	4/25/2000	1600-2000	210	RC 27	ND
PExpD1	4/25/2000	2000-2300	90	RC 28	ND
PExpD2	4/26/2000	2300-0645	380	RC 29	ND
PExpD2	4/26/2000	0800-1200	200	RC 30	ND
PExpD2	4/26/2000	1200-1600	175	RC 31	ND
PExpD2	4/26/2000	1600-2000	225	RC 32	ND
PExpD2	4/26/2000	2000-2300	235	RC 33	ND
PExpD3	4/27/2000	2300-0645	550	RC 34	ND
PExpD3	4/27/2000	0800-1200	222	RC 35	ND
PExpD3	4/27/2000	1200-1600	250	RC 36	ND
PExpD3	4/27/2000	1600-2000	185	RC 37	ND
PExpD3	4/27/2000	2000-2300	332	RC 38	ND
PExpD4	4/28/2000	2300-0645	278	RC 39	ND
PExpD4	4/28/2000	0800-1200	180	RC 40	ND

## Urine Perchlorate Data - 0.5 mg/kg/d

<b>Study Exposure Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol</b>	<b>Sample</b>	<b>Concentration</b>
					(ppm)
PExpD4	4/28/2000	1200-1600	255	RC 41	ND
PExpD4	4/28/2000	1600-2000	200	RC 42	ND
PExpD4	4/28/2000	2000-2300	180	RC 43	ND
PExpD5	4/29/2000	2300-0645	320	RC 44	ND
PExpD14	5/8/2000	0800-1200	280	RC 45	ND
PExpD14	5/8/2000	1200-1600	250	RC 46	ND
PExpD14	5/8/2000	1600-2000	180	RC 47	ND
PExpD14	5/8/2000	2000-2300	200	RC 48	ND
PExpD15	5/9/2000	2300-0645	322	RC 49	ND

Urine Perchlorate Data - 0.1 mg/kg/d

**RT -not completed**

<b>Subject</b>	<b>NR</b>	<b>med-Nurine</b>				
<b>Body Weight (kg)</b>	<b>70</b>					
<b>Sex</b>	<b>M</b>					
<b>Age</b>	<b>23</b>					
<b>Dose Group (mg/kg-d)</b>	<b>0.1</b>					
<b>Study Exposure</b>		<b>Concentration</b>				
<b>Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (ml)</b>	<b>Sample</b>	<b>(ppm)</b>	
Baseline	3/2/2000		6:40	245	NR 4	ND
ExpD1	3/7/2000		15:12	275	NR 5	3.775
ExpD1	3/7/2000		19:25	130	NR 6	8.233
ExpD1	3/7/2000		23:15	160	NR 7	6.437
ExpD2	3/8/2000		0:30	60	NR 8	4.867
ExpD2	3/8/2000		6:42	265	NR 9	2.719
ExpD2	3/8/2000		10:25	515	NR 10	1.350
ExpD2	3/8/2000		14:15	390	NR 11	2.817
ExpD2	3/8/2000		18:15	610	NR 12	3.434
ExpD2	3/8/2000		23:15	760	NR 13	1.860
ExpD3	3/9/2000		6:45	375	NR 14	2.823
ExpD8	3/14/2000		12:05	490	NR 15	2.484
ExpD8	3/14/2000		16:20	200	NR 16	6.645
ExpD8	3/14/2000		20:05	330	NR 17	3.591
ExpD8	3/14/2000		23:05	350	NR 18	2.637
ExpD9	3/15/2000		7:55	230	NR 19	5.127
ExpD14	3/20/2000		13:40	305	NR 20	8.297
ExpD14	3/20/2000		17:05	480	NR 21	10.01802386
ExpD14	3/20/2000		21:40	230	NR 22	11.26594917
PExpD1	3/21/2000		7:20	280	NR 23	6.260114108
PExpD1	3/21/2000		13:35	510	NR 24	1.362416107
PExpD1	3/21/2000		17:10	205	NR 25	0.987484128
PExpD1	3/21/2000		20:50	180	NR 26	0.722595078
PExpD1	3/21/2000		23:55	330	NR 27	0.221536973
PExpD2	3/22/2000		7:10	140	NR 28	ND
PExpD2	3/22/2000		14:55	410	NR 29	ND
PExpD2	3/22/2000		17:50	250	NR 30	ND
PExpD2	3/22/2000		22:45	380	NR 31	ND
PExpD3	3/23/2000		6:30	445	NR 32	ND
PExpD3	3/23/2000		15:05	515	NR 33	ND
PExpD3	3/23/2000		17:40	360	NR 34	ND
PExpD3	3/23/2000		19:35	470	NR 35	ND
PExpD3	3/23/2000		23:40	300	NR 36	ND
PExpD4	3/24/2000		7:10	200	NR 37	ND
PExpD4	3/24/2000		13:45	315	NR 38	ND
PExpD4	3/24/2000		17:45	150	NR 39	ND
PExpD4	3/24/2000		22:10	250	NR 40	ND
PExpD5	3/25/2000		1:10	145	NR 41	ND
PExpD5	3/25/2000		7:55	150	NR 42	ND
PExpD14	4/3/2000		13:15	210	NR 43	ND
PExpD14	4/3/2000		18:00	280	NR 44	ND
PExpD14	4/3/2000		20:25	335	NR 45	ND
PExpD15	4/4/2000		0:15	205	NR 46	ND
PExpD15	4/4/2000		6:40	165	NR 47	ND

Urine Perchlorate Data - 0.1 mg/kg/d

Study Exposure		Actual Date	Actual Time	Vol (ml)	Sample	Concentration	
Day	Subject					(ppm)	(ppm)
	Body Weight (kg)			KN			
	Sex			75			
	Age			m			
	Dose Group (mg/kg-d)			49			
	Study Exposure			0.1			
Study Exposure		Actual Date	Actual Time	Vol (ml)	Sample	Concentration	
Day	Date		Time	Vol (mL)	Sample	(ppm)	(ppm)
Baseline	3/9/2000		8:00	39	KN 1	ND	
ExpD1	3/14/2000		9:22	305	KN 2	0.169	*BDL
ExpD1	3/14/2000		11:20	322	KN 3	0.918	
ExpD1	3/14/2000		14:40	265	KN 4	2.791	
ExpD1	3/14/2000		17:40	295	KN 5	2.802	
ExpD1	3/14/2000		19:50	357	KN 6	2.172	
ExpD1	3/14/2000		21:55	243	KN 7	1.244	
ExpD1	3/14/2000		23:05	126	KN 8	2.675	
ExpD2	3/15/2000		5:55	503	KN 9	2.759	
ExpD2	3/15/2000		8:05	110	KN 10	1.960	
ExpD2	3/15/2000		10:40	231	KN 11	3.490	
ExpD2	3/15/2000		13:45	265	KN 12	3.573	
ExpD2	3/15/2000		16:15	315	KN 13	1.289	
ExpD2	3/15/2000		18:05	278	KN 14	2.041	
ExpD2	3/15/2000		23:05	115	KN 15	6.820	
ExpD3	3/16/2000		5:55	277	KN 16	4.618	
ExpD3	3/16/2000		8:05	130	KN 17	1.957	
ExpD8	3/21/2000		9:50	240	KN 18	1.400	
ExpD8	3/21/2000		12:30	275	KN 19	1.736	
ExpD8	3/21/2000		15:55	270	KN 20	3.219	
ExpD8	3/21/2000		19:50	215	KN 21	4.140	
ExpD8	3/21/2000		22:10	95	KN 22	5.471	
ExpD9	3/22/2000		8:00	275	KN 23	5.540	
ExpD14	3/27/2000		10:25	245	KN 24	2.449	
ExpD14	3/27/2000		16:25	260	KN 25	4.782	
ExpD14	3/27/2000		20:25	212	KN 26	6.993	
ExpD14	3/27/2000		22:25	98	KN 27	8.085	
PExpD1	3/28/2000		5:55	510	KN 28	3.735	
PExpD1	3/28/2000		7:55	205	KN 29	0.475	
PExpD1	3/28/2000		11:27	318	KN 30	1.684	
PExpD1	3/28/2000		15:20	290	KN 31	0.860	
PExpD1	3/28/2000		16:22	170	KN 32	0.471	
PExpD1	3/28/2000		17:28	262	KN 33	0.093	*BDL
PExpD1	3/28/2000		20:25	292	KN 34	0.310	
PExpD1	3/28/2000		22:10	107	KN 35	0.459	
PExpD2	3/29/2000		6:05	308	KN 36	0.198	*BDL
PExpD2	3/29/2000		8:10	105	KN 37	ND	
PExpD2	3/29/2000		12:05	220	KN 38	0.091	*BDL
PExpD2	3/29/2000		15:35	305	KN 39	ND	
PExpD2	3/29/2000		17:50	130	KN 40	0.146	*BDL
PExpD2	3/29/2000		20:35	222	KN 41	ND	
PExpD2	3/29/2000		22:10	103	KN 42	ND	
PExpD3	3/30/2000		5:55	420	KN 43	ND	
PExpD3	3/30/2000		8:10	115	KN 44	ND	
PExpD3	3/30/2000		11:30	290	KN 45	ND	

Urine Perchlorate Data - 0.1 mg/kg/d

Study Exposure		Concentration			
Day	Actual Date	Actual Time	Vol (ml)	Sample	(ppm)
PExpD3	3/30/2000	13:50	282	KN 46	ND
PExpD3	3/30/2000	16:20	145	KN 47	ND
PExpD3	3/30/2000	18:40	198	KN 48	ND
PExpD3	3/30/2000	22:15	127	KN 49	ND
PExpD4	3/31/2000	6:00	210	KN 50	ND
PExpD4	3/31/2000	8:05	42	KN 51	ND
PExpD4	3/31/2000	14:05	210	KN 52	ND
PExpD4	3/31/2000	16:00	118	KN 53	ND
PExpD4	3/31/2000	17:40	272	KN 54	ND
PExpD4	3/31/2000	21:00	285	KN 55	ND
PExpD5	4/1/2000	0:20	172	KN 56	ND
PExpD5	4/1/2000	6:45	230	KN 57	ND
PExpD5	4/1/2000	7:59	32	KN 58	ND
PExpD16	4/10/2000	12:20	155	KN 59	ND
PExpD16	4/10/2000	15:50	212	KN 60	ND
PExpD16	4/10/2000	20:20	272	KN 61	ND
PExpD16	4/10/2000	22:15	60	KN 62	ND
PExpD17	4/11/2000	4:55	432	KN 63	ND
PExpD17	4/11/2000	6:00	272	KN 64	ND
PExpD17	4/11/2000	8:05	53	KN 65	ND

**Subject** JF  
**Body Weight (kg)** 67.5  
**Sex** F  
**Age** 44  
**Dose Group (mg/kg-d)** 0.1

Study Exposure		Concentration			
Day	Actual Date	Actual Time	Vol (ml)	Sample	(ppm)
Baseline	3/16/2000	6:00	285	JF 4	ND
ExpD1	3/21/2000	11:30	185	JF 5	1.673
ExpD1	3/21/2000	15:30	335	JF 6	0.954
ExpD1	3/21/2000	19:50	395	JF 7	0.990
ExpD1	3/21/2000	21:50	65	JF 8	1.515
ExpD2	3/22/2000	6:40	475	JF 9	1.515
ExpD2	3/22/2000	11:40	350	JF 10	1.700
ExpD2	3/22/2000	15:30	230	JF 11	2.025
ExpD2	3/22/2000	21:10	140	JF 12	4.218
ExpD3	3/23/2000	7:55	565	JF 13	3.194
ExpD8	3/28/2000	11:50	225	JF 14	2.017
ExpD8	3/28/2000	16:00	140	JF 15	2.204
ExpD8	3/28/2000	20:45	290	JF 16	1.964
ExpD8	3/28/2000	22:00	45	JF 17	1.288
ExpD9	3/29/2000	8:30	945	JF 18	1.114
ExpD14	4/3/2000	11:50	690	JF 19	0.766
ExpD14	4/3/2000	15:35	275	JF 20	1.768
ExpD14	4/3/2000	21:00	125	JF 21	3.997
PExD1	4/4/2000	8:00	310	JF 22	3.153
PExD1	4/4/2000	13:00	160	JF 23	2.662
PExD1	4/4/2000	16:20	80	JF 24	0.831
PExD1	4/4/2000	20:15	145	JF 25	0.742
PExD1	4/4/2000	22:20	85	JF 26	ND
PExD2	4/5/2000	8:15	430	JF 27	ND

Urine Perchlorate Data - 0.1 mg/kg/d

Study Exposure					Concentration
Day	Actual Date	Actual Time	Vol (ml)	Sample	(ppm)
PExD2	4/5/2000	13:00	195	JF 28	ND
PExD2	4/5/2000	15:40	70	JF 29	ND
PExD2	4/5/2000	19:15	115	JF 30	ND
PExD2	4/5/2000	22:30	140	JF 31	ND
PExD3	4/6/2000	8:20	370	JF 32	ND
PExD3	4/6/2000	11:55	140	JF 33	ND
PExD3	4/6/2000	15:50	425	JF 34	ND
PExD3	4/6/2000	20:20	165	JF 35	ND
PExD3	4/6/2000	22:50	145	JF 36	ND
PExD4	4/7/2000	8:10	390	JF 37	ND
PExD4	4/7/2000	12:00	135	JF 38	ND
PExD4	4/7/2000	16:10	120	JF 39	ND
PExD4	4/7/2000	19:55	125	JF 40	ND
PExD4	4/7/2000	23:30	175	JF 41	ND
PExD5	4/8/2000	8:10	630	JF 42	ND
PExD14	4/17/2000	12:20	260	JF 43	ND
PExD14	4/17/2000	15:00	470	JF 44	ND
PExD14	4/17/2000	10:30	670	JF 45	ND
PExD14	4/17/2000	23:15	75	JF 46	ND
PExD15	4/18/2000	7:50	705	JF 47	ND

**Subject** RB1  
**Body Weight (kg)** 84  
**Sex** m  
**Age** 26  
**Dose Group (mg/kg-d)** 0.1  
**Study Exposure**

Study Exposure					Concentration
Day	Actual Date	Actual Time	Volume(ml)	Sample	(ppb)
Baseline	3/23/2000	0:00	305	RB 4	2.0388
ExpD1	3/28/2000	8:00	530	RB 5	0.6453
ExpD1	3/28/2000	12:00	340	RB 6	1.7191
ExpD1	3/28/2000	16:00	700	RB 7	1.9671
ExpD1	3/28/2000	20:00	205	RB 8	4.8334
ExpD2	3/29/2000	0:00	325	RB 9	6.2546
ExpD2	3/29/2000	8:00	305	RB 10	2.3568
ExpD2	3/29/2000	12:00	505	RB 11	3.5369
ExpD2	3/29/2000	16:00	210	RB 12	6.8635
ExpD2	3/29/2000	20:00	400	RB 13	2.7416
ExpD3	3/30/2000	0:00	350	RB 14	2.3949
ExpD8	4/4/2000	8:00	575	RB 15	4.1298
ExpD8	4/4/2000	12:00	375	RB 16	4.3933
ExpD8	4/4/2000	16:00	250	RB 17	2.8743
ExpD8	4/4/2000	20:00	125	RB 18	9.6982
ExpD9	4/5/2000	0:00	225	RB 19	12.5298
ExpD14	4/10/2000	16:00	385	RB 20	7.9138
ExpD14	4/10/2000	20:00	250	RB 21	5.0236
PExpD1	4/11/2000	0:00	435	RB 22	5.1101
			275	RB 23	0.0000
PExpD1	4/11/2000	8:00	275	RB 23	4.5026
PExpD1	4/11/2000	12:00	200	RB 24	0.8337
PExpD1	4/11/2000	16:00	500	RB 25	1.1777
PExpD1	4/11/2000	20:00	575	RB 26	ND

Urine Perchlorate Data - 0.1 mg/kg/d

<b>Study Exposure</b>					<b>Concentration</b>
<b>Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (ml)</b>	<b>Sample</b>	<b>(ppm)</b>
PExpD2	4/12/2000	0:00	1750	RB 27	ND
PExpD2	4/12/2000	8:00	375	RB 28	ND
PExpD2	4/12/2000	12:00	125	RB 29	ND
PExpD2	4/12/2000	16:00	125	RB 30	ND
PExpD2	4/12/2000	20:00	150	RB 31	ND
PExpD3	4/13/2000	0:00	320	RB 32	ND
PExpD3	4/13/2000	8:00	405	RB 33	ND
PExpD3	4/13/2000	16:00	375	RB 34	ND
PExpD3	4/13/2000	20:00	275	RB 35	ND
PExpD4	4/14/2000	0:00	300	RB 36	ND
PExpD4	4/14/2000	8:00	200	RB 37	ND
PExpD4	4/14/2000	12:00	200	RB 38	ND
PExpD4	4/14/2000	20:00	600	RB 39	ND
PExpD5	4/15/2000	0:00	350	RB 40	ND
PExpD16	4/24/2000	16:00	250	RB 41	ND
PExpD16	4/24/2000	20:00	200	RB 42	ND
PExpD16	4/24/2000	23:00	200	RB 43	ND
PExpD17	4/25/2000	8:00	350	RB 44	ND

**Subject** AH  
**Body Weight (kg)** 65.9  
**Sex** F  
**Age** 25  
**Dose Group (mg/kg-d)** 0.1

<b>Study Exposure</b>					<b>Concentration</b>
<b>Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (ml)</b>	<b>Sample</b>	<b>(ppm)</b>
	3/29/2000	8-12PM	550	AH 1	ND
	3/29/2000	12-4PM	295	AH 2	ND
	3/29/2000	4-8PM	400	AH 3	ND
	3/29/2000	8-BED	90	AH 4	ND
Baseline	3/30/2000	BED-8AM	700	AH 5	ND
ExpD1	4/4/2000	8-12PM	605	AH 6	0.863
ExpD1	4/4/2000	12-4PM	425	AH 7	1.443
ExpD1	4/4/2000	4-8PM	415	AH 8	3.605
ExpD1	4/4/2000	8-BED	175	AH 9	3.813
ExpD2	4/5/2000	BED-8AM	550	AH 10	4.999
ExpD2	4/5/2000	8-12PM	415	AH 11	2.239
ExpD2	4/5/2000	12-4PM	1230	AH 12	0.732
ExpD2	4/5/2000	4-8PM	275	AH 13	3.483
ExpD3	4/5/2000	8-BED	75	AH 14	8.734
ExpD3	4/6/2000	BED-8AM	425	AH 15	4.191
ExpD8	4/11/2000	8-12PM	335	AH 16	3.335
ExpD8	4/11/2000	12-4PM	715	AH 17	1.477
ExpD8	4/11/2000	4-8PM	630	AH 18	1.927
ExpD8	4/11/2000	8-BED	320	AH 19	4.838
ExpD9	4/12/2000	BED-8AM	550	AH 20	4.314
ExpD14	4/17/2000	8-12PM	135	AH 21	5.523
ExpD14	4/17/2000	12-4PM	335	AH 22	3.353
ExpD14	4/17/2000	4-8PM	565	AH 23	2.063
ExpD14	4/17/2000	8-BED	220	AH 24	2.114
PExD1	4/18/2000	BED-8AM	535	AH 25	2.230
PExD1	4/18/2000	8-12PM	500	AH 26	1.056

Urine Perchlorate Data - 0.1 mg/kg/d

<b>Study Exposure</b>					<b>Concentration</b>
<b>Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (ml)</b>	<b>Sample</b>	<b>(ppm)</b>
PExD1	4/18/2000	12-4PM	180	AH 27	1.268
PExD1	4/18/2000	4-8PM	235	AH 28	1.045
PExD1	4/18/2000	8-BED	350	AH 29	ND
PExD2	4/19/2000	BED-8AM	655	AH 30	ND
PExD2	4/19/2000	8-12PM	365	AH 31	ND
PExD2	4/19/2000	12-4PM	505	AH 32	ND
PExD2	4/19/2000	4-8PM	190	AH 33	ND
PExD2	4/19/2000	8-BED	55	AH 34	ND
PExD3	4/20/2000	BED-8AM	615	AH 35	ND
PExD3	4/20/2000	8-12PM	199	AH 36	ND
PExD3	4/20/2000	12-4PM	300	AH 37	ND
PExD3	4/20/2000	4-8PM	445	AH 38	ND
PExD3	4/20/2000	8-BED	115	AH 39	ND
PExD4	4/21/2000	BED-8AM	525	AH 40	ND
PExD4	4/21/2000	8-12PM	330	AH 41	ND
PExD4	4/21/2000	12-4PM	455	AH 42	ND
PExD4	4/21/2000	4-8PM	155	AH 43	ND
PExD4	4/21/2000	8-BED	340	AH 44	ND
PExD5	4/22/2000	BED-8AM	790	AH 45	ND
PExD16	5/1/2000	8-12PM	335	AH 46	ND
PExD16	5/1/2000	12-4PM	80	AH 47	ND
PExD16	5/1/2000	4-8PM	330	AH 48	ND
PExD16	5/1/2000	8-BED	220	AH 49	ND
PExD17	5/2/2000	BED-8AM	655	AH 50	ND

<b>Subject</b>	<b>SG</b>	<b>med-SGurine</b>
<b>Body Weight (kg)</b>	<b>106</b>	
<b>Sex</b>	<b>F</b>	
<b>Age</b>	<b>52</b>	
<b>Dose Group (mg/kg-d)</b>	<b>0.1</b>	

<b>Study Exposure</b>					<b>Concentration</b>
<b>Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (mL)</b>	<b>Sample</b>	<b>(ppm)</b>
Baseline	4/6/2000	1-8a	485	SG 5	ND
ExpD1	4/11/2000	8a-12p	265	SG 6	1.637
ExpD1	4/11/2000	12-4p	185	SG 7	5.313
ExpD1	4/11/2000	4-8p	225	SG 8	6.635
ExpD1	4/11/2000	8p-1a	180	SG 9	5.459
ExpD2	4/12/2000	1-8a	485	SG 10	3.938
ExpD2	4/12/2000	8a-12p	305	SG 11	4.308
ExpD2	4/12/2000	12-4p	800	SG 12	2.530
ExpD2	4/12/2000	4-8p	1115	SG 13	1.860
ExpD2	4/12/2000	8p-1a	415	SG 14	3.539
ExpD3	4/13/2000	1-8a	550	SG 15	4.772
ExpD8	4/18/2000	8a-12p	200	SG 16	4.401
ExpD8	4/18/2000	12-4p	40	SG 17	3.838
ExpD8	4/18/2000	4-8p	327	SG 18	4.637
ExpD8	4/18/2000	8p-1a	155	SG 19	9.040
ExpD9	4/19/2000	1-8a	320	SG 20	5.426
ExpD14	4/24/2000	8a-12p	520	SG 21	3.112
ExpD14	4/24/2000	12-4p	500	SG 22	3.505841043
ExpD14	4/24/2000	4-8p	440	SG 23	3.811466
ExpD14	4/24/2000	8p-2:30a	995	SG 24	2.298129516

Urine Perchlorate Data - 0.1 mg/kg/d

<b>Study Exposure</b>					<b>Concentration</b>
<b>Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (ml)</b>	<b>Sample</b>	<b>(ppm)</b>
PExpD1	4/25/2000	2:30-8a	870	SG 25	1.606455534
PExpD1	4/25/2000	8a-12p	440	SG 26	1.982983321
PExpD1	4/25/2000	12-4p	620	SG 27	0.78405024
PExpD1	4/25/2000	4-8p	400	SG 28	0.616854615
PExpD1	4/25/2000	8p-1a	595	SG 29	0.356539942
PExpD2	4/26/2000	1-8a	495	SG 30	0.373624147
PExpD2	4/26/2000	8a-2p	290	SG 31	0.64805186
PExpD2	4/26/2000	2-4p	565	SG 32	ND
PExpD2	4/26/2000	4-8p	675	SG 33	ND
PExpD2	4/26/2000	8p-1a	1135	SG 34	ND
PExpD3	4/27/2000	1-8a	470	SG 35	ND
PExpD3	4/27/2000	8a-12p	215	SG 36	ND
PExpD3	4/27/2000	12-4p	145	SG 37	ND
PExpD3	4/27/2000	4-8p	195	SG 38	ND
PExpD3	4/27/2000	8p-1a	190	SG 39	ND
PExpD4	4/28/2000	1-8a	865	SG 40	ND
PExpD4	4/28/2000	8a-12p	365	SG 41	ND
PExpD4	4/28/2000	12-4p	490	SG 42	ND
PExpD4	4/28/2000	4-8p	790	SG 43	ND
PExpD4	4/28/2000	8p-1a	100	SG 44	ND
PExpD5	4/29/2000	1-8a	1080	SG 45	ND
PExpD14	5/8/2000	8a-12p	630	SG 46	ND
PExpD14	5/8/2000	12-4p	780	SG 47	ND
PExpD14	5/8/2000	4-8p	610	SG 48	ND
PExpD14	5/8/2000	8p-12:45a	660	SG 49	ND
PExpD14	5/8/2000	12:45-8a	605	SG 50	ND

<b>Subject</b>	<b>AB2</b>				
<b>Body Weight (kg)</b>	<b>86.4</b>				
<b>Sex</b>	<b>m</b>				
<b>Age</b>	<b>24</b>				
<b>Dose Group (mg/kg-d)</b>	<b>0.5</b>				
<b>Study Exposure</b>					<b>Concentration</b>
<b>Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (mL)</b>	<b>Sample</b>	<b>(ppm)</b>
Baseline	4/13/2000	BED-8AM	180	AB2 4	ND
ExpD1	4/18/2000	8-12PM	319	AB2 5	1.682
ExpD1	4/18/2000	12-4PM	184	AB2 6	5.369
ExpD1	4/18/2000	4-8PM	170	AB2 7	7.288
ExpD1	4/18/2000	8-12PM	194	AB2 8	6.749
ExpD2	4/19/2000	8-12PM	296	AB2 9	8.772
ExpD2	4/19/2000	12-4PM	510	AB2 10	5.180
ExpD2	4/19/2000	4-8PM	688	AB2 11	2.165
ExpD3	4/19-20/00	8PM-8AM	1185	AB2 12	2.562
ExpD8	4/25/2000	8-12PM	333	AB2 13	6.938
ExpD8	4/25/2000	12-4PM	250	AB2 14	6.885
ExpD8	4/25/2000	4-8PM	270	AB2 15	3.748
ExpD9	4/26/2000	12-8AM	105	AB2 16	5.794
ExpD14	5/2/2000	8-12PM	125	AB2 17	4.759
ExpD14	5/2/2000	12-4PM	598	AB2 18	3.009
ExpD14	5/2/2000	4-8PM	305	AB2 19	3.867
ExpD14	5/2/2000	8-12AM	218	AB2 20	5.745
PExpD1	5/3/2000	8-12PM	555	AB2 21	2.996

Urine Perchlorate Data - 0.1 mg/kg/d

<b>Study Exposure</b>					<b>Concentration</b>
<b>Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (ml)</b>	<b>Sample</b>	<b>(ppm)</b>
PExpD1	5/3/2000	12-4PM	856	AB2 22	0.398
PExpD1	5/3/2000	4-8PM	314	AB2 23	0.998
PExpD1	5/3/2000	8-12AM	316	AB2 24	0.554
PExpD2	5/4/2000	12-8AM	416	AB2 25	0.409
PExpD2	5/4/2000	8-12PM	165	AB2 26	0.572
PExpD2	5/4/2000	12-4PM	205	AB2 27	0.497
PExpD2	5/4/2000	4-8PM	340	AB2 28	0.237
PExpD2	5/4/2000	8-12AM	340	AB2 29	ND
PExpD3	5/5/2000	12-8AM	202	AB2 30	ND
PExpD3	5/5/2000	12-4PM	115	AB2 31	ND
PExpD3	5/5/2000	4-8PM	195	AB2 32	ND
PExpD4	5/6/2000	12-8AM	540	AB2 33	ND
PExpD4	5/6/2000	8-12PM	305	AB2 34	ND
PExpD4	5/6/2000	12-4PM	217	AB2 35	ND
PExpD4	5/6/2000	4-8PM	110	AB2 36	ND
PExpD16	5/16/2000	8-12PM	340	AB2 37	ND
PExpD16	5/16/2000	12-4PM	135	AB2 38	ND
PExpD16	5/16/2000	4-8PM	235	AB2 39	ND
PExpD16	5/16/2000	8-12AM	280	AB2 40	ND
PExpD17	5/17/2000	12-8AM	155	AB2 41	ND

## Urine Perchlorate Data - 0.02 mg/kg/d

**Subject**                   **SV - not completed**

<b>Subject</b>	<b>CB</b>	<b>low-CBurine</b>			
<b>Body Weight (kg)</b>	<b>72.7</b>				
<b>Sex</b>	<b>F</b>				
<b>Age</b>	<b>34</b>				
<b>Dose Group (mg/kg-d)</b>	<b>0.02</b>				
		<b>Concentration</b>			
<b>Study Exposure Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (ml)</b>	<b>Sample</b>	<b>(ppm)</b>
Baseline	2/24/2000	7:25	65	CB 12	ND
ExpD1	2/29/2000	12:25	200	CB 13	0.282
ExpD1	2/29/2000	12:50	310	CB 14	0.174
ExpD1	2/29/2000	13:40	250	CB 15	0.160
ExpD1	2/29/2000	15:20	210	CB 16	0.301
ExpD1	2/29/2000	17:20	170	CB 17	0.470
ExpD1	2/29/2000	18:30	125	CB 18	0.619
ExpD1	2/29/2000	22:05	150	CB 19	0.816
ExpD1	2/29/2000	23:20	70	CB 20	0.922
ExpD2	3/1/2000	3:10	340	CB 93	ND
ExpD2	3/1/2000	6:20	300	CB 94	ND
ExpD2	3/1/2000	7:45	160	CB 95	ND
ExpD2	3/1/2000	8:55	165	CB 21	0.287
ExpD2	3/1/2000	10:30	430	CB 22	0.202
ExpD2	3/1/2000	11:53	250	CB 23	0.155
ExpD2	3/1/2000	15:25	170	CB 24	1.223
ExpD2	3/1/2000	16:45	130	CB 25	0.455
ExpD2	3/1/2000	18:00	220	CB 26	0.361
ExpD2	3/1/2000	18:40	50	CB 27	0.841
ExpD2	3/1/2000	21:10	120	CB 28	1.543
ExpD2	3/1/2000	22:25	55	CB 29	1.623424258
ExpD8	3/7/2000	9:40	95	CB 30	1.437860551
ExpD8	3/7/2000	12:40	115	CB 31	1.096681148
ExpD8	3/7/2000	15:00	180	CB 32	0.701018446
ExpD8	3/7/2000	16:20	265	CB 33	0.257994445
ExpD8	3/7/2000	17:30	235	CB 34	0.282992664
ExpD8	3/7/2000	19:35	290	CB 35	0.426536571
ExpD8	3/7/2000	22:05	200	CB 36	0.553343779
ExpD8	3/7/2000	23:10	200	CB 37	0.248486575
ExpD9	3/8/2000	0:30	120	CB 38	0.421408732
ExpD9	3/8/2000	6:00	455	CB 39	0.275514564
ExpD9	3/8/2000	6:45	80	CB 40	0.365714693
ExpD14	3/13/2000	12:40	180	CB 41	0.50779859
ExpD14	3/13/2000	16:39	230	CB 42	0.51029129
ExpD14	3/13/2000	18:00	250	CB 43	0.268072075
ExpD14	3/13/2000	19:30	100	CB 44	0.715618546
ExpD14	3/13/2000	21:55	125	CB 45	0.536144149
PExpD1	3/14/2000	1:20	120	CB 46	0.802400114
PExpD1	3/14/2000	5:50	305	CB 47	0.350936543
PExpD1	3/14/2000	6:45	65	CB 48	0.551776939
PExpD1	3/14/2000	11:35	155	CB 49	0.5024927
PExpD1	3/14/2000	17:00	295	CB 50	ND

Urine Perchlorate Data - 0.02 mg/kg/d

<b>Study Exposure Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (ml)</b>	<b>Sample</b>	<b>Concentration (ppm)</b>
PExpD1	3/14/2000	18:25	100	CB 51	ND
PExpD1	3/14/2000	22:05	220	CB 52	ND
PExpD1	3/14/2000	23:00	80	CB 53	ND
PExpD1	3/14/2000	23:20	150	CB 54	ND
PExpD1	3/14/2000	23:35	100	CB 55	ND
PExpD2	3/15/2000	6:00	250	CB 56	ND
PExpD2	3/15/2000	10:05	220	CB 57	ND
PExpD2	3/15/2000	12:25	140	CB 58	ND
PExpD2	3/15/2000	17:13	205	CB 59	ND
PExpD2	3/15/2000	17:55	120	CB 60	ND
PExpD2	3/15/2000	19:45	220	CB 61	ND
PExpD2	3/15/2000	21:55	140	CB 62	ND
PExpD3	3/16/2000	5:50	430	CB 63	ND
PExpD3	3/16/2000	7:08	80	CB 64	ND
PExpD3	3/16/2000	9:15	150	CB 65	ND
PExpD3	3/16/2000	11:30	200	CB 66	ND
PExpD3	3/16/2000	14:20	225	CB 67	ND
PExpD3	3/16/2000	15:05	170	CB 68	ND
PExpD3	3/16/2000	16:30	150	CB 69	ND
PExpD3	3/16/2000	19:00	110	CB 70	ND
PExpD3	3/16/2000	21:30	120	CB 71	ND
PExpD3	3/16/2000	22:30	50	CB 72	ND
PExpD3	3/16/2000	23:40	90	CB 73	ND
PExpD4	3/17/2000	6:05	385	CB 74	ND
PExpD4	3/17/2000	7:40	55	CB 75	ND
PExpD4	3/17/2000	11:15	120	CB 76	ND
PExpD4	3/17/2000	11:59	115	CB 77	ND
PExpD4	3/17/2000	16:00	215	CB 78	ND
PExpD4	3/17/2000	17:30	110	CB 79	ND
PExpD4	3/17/2000	19:00	150	CB 80	ND
PExpD4	3/17/2000	19:33	160	CB 81	ND
PExpD4	3/17/2000	23:25	240	CB 82	ND
PExpD5	3/18/2000	0:35	285	CB 83	ND
PExpD5	3/18/2000	7:30	185	CB 84	ND
PExpD14	3/27/2000	8:43	130	CB 85	ND
PExpD14	3/27/2000	11:45	210	CB 86	ND
PExpD14	3/27/2000	12:19	200	CB 87	ND
PExpD14	3/27/2000	16:40	270	CB 88	ND
PExpD14	3/27/2000	17:50	145	CB 89	ND
PExpD14	3/27/2000	20:25	130	CB 90	ND
PExpD14	3/27/2000	22:20	95	CB 91	ND
PExpD15	3/28/2000	6:00	420	CB 92	ND

<b>Subject</b>	<b>QY</b>	<b>low-QYurine</b>
<b>Body Weight (kg)</b>	<b>66</b>	
<b>Sex</b>	<b>M</b>	
<b>Age</b>	<b>57</b>	
<b>Dose Group (mg/kg-d)</b>	<b>0.02</b>	

## Urine Perchlorate Data - 0.02 mg/kg/d

<b>Study Exposure Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (ml)</b>	<b>Sample</b>	<b>Concentration</b>
					<b>(ppm)</b>
<b>Study Exposure Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (ml)</b>	<b>Sample</b>	<b>Concentration</b>
Baseline	3/2/2000	6:40	350	QY 8	ND
ExpD1	3/7/2000	8:15	250	QY 9	ND
ExpD1	3/7/2000	8:45	325	QY 10	ND
ExpD1	3/7/2000	9:15	300	QY 11	0.098
ExpD1	3/7/2000	11:00	200	QY 12	0.222
ExpD1	3/7/2000	13:00	110	QY 13	0.691
ExpD1	3/7/2000	15:40	175	QY 14	0.529
ExpD1	3/7/2000	18:20	170	QY 15	0.682
ExpD1	3/7/2000	23:00	120	QY 16	0.989
ExpD2	3/8/2000	6:30	670	QY 17	0.348
ExpD2	3/8/2000	8:30	170	QY 18	0.236
ExpD2	3/8/2000	9:40	170	QY 19	0.379
ExpD2	3/8/2000	11:45	180	QY 20	0.379
ExpD2	3/8/2000	13:55	550	QY 21	0.447
ExpD2	3/8/2000	17:15	210	QY 22	0.834
ExpD2	3/8/2000	21:00	150	QY 23	1.168
ExpD3	3/9/2000	2:00	425	QY 24	0.499
ExpD3	3/9/2000	6:40	425	QY 25	0.327131977
ExpD8	3/14/2000	9:20	270	QY 26	0.365370209
ExpD8	3/14/2000	13:30	195	QY 27	0.471969035
ExpD8	3/14/2000	17:30	185	QY 28	0.626669996
ExpD8	3/14/2000	20:40	185	QY 29	0.536302909
ExpD8	3/14/2000	23:00	280	QY 30	0.310453118
ExpD9	3/15/2000	1:40	425	QY 31	0.170095494
ExpD9	3/15/2000	6:45	232	QY 32	0.625200282
ExpD9	3/15/2000	7:50	85	QY 33	0.528648337
ExpD14	3/20/2000	9:00	295	QY 34	0.30039095
ExpD14	3/20/2000	9:40	135	QY 35	0.467249888
ExpD14	3/20/2000	10:45	237	QY 36	0.243382683
ExpD14	3/20/2000	15:15	308	QY 37	0.826059091
ExpD14	3/20/2000	18:20	182	QY 38	0.986861501
ExpD14	3/20/2000	20:30	130	QY 39	1.170351855
PExpD1	3/21/2000	5:40	585	QY 40	0.559155291
PExpD1	3/21/2000	7:20	220	QY 41	0.32586682
PExpD1	3/21/2000	8:30	105	QY 42	0.45167596
PExpD1	3/21/2000	9:45	166	QY 43	0.355252195
PExpD1	3/21/2000	11:30	180	QY 44	0.422611036
PExpD1	3/21/2000	15:00	162	QY 45	0.382426456
PExpD1	3/21/2000	19:55	185	QY 46	0.297731206
PExpD1	3/21/2000	20:15	170	QY 47	ND
PExpD2	3/22/2000	6:10	445	QY 48	ND
PExpD2	3/22/2000	8:30	265	QY 49	ND
PExpD2	3/22/2000	9:20	176	QY 50	ND
PExpD2	3/22/2000	12:30	195	QY 51	ND
PExpD2	3/22/2000	16:45	135	QY 52	ND
PExpD2	3/22/2000	20:40	176	QY 53	ND
PExpD2	3/22/2000	23:00	135	QY 54	ND
PExpD3	3/23/2000	6:20	625	QY 55	ND

Urine Perchlorate Data - 0.02 mg/kg/d

Study Exposure Day	Actual Date	Actual Time	Vol (ml)	Sample	Concentration
					(ppm)
PExpD3	3/23/2000	8:30	240	QY 56	ND
PExpD3	3/23/2000	10:15	170	QY 57	ND
PExpD3	3/23/2000	14:10	140	QY 58	ND
PExpD3	3/23/2000	17:00	105	QY 59	ND
PExpD3	3/23/2000	20:10	145	QY 60	ND
PExpD4	3/24/2000	6:20	252	QY 61	ND
PExpD4	3/24/2000	8:20	105	QY 62	ND
PExpD4	3/24/2000	11:40	142	QY 63	ND
PExpD4	3/24/2000	14:00	195	QY 64	ND
PExpD4	3/24/2000	15:45	118	QY 65	ND
PExpD4	3/24/2000	16:15	170	QY 66	ND
PExpD4	3/24/2000	23:30	170	QY 67	ND
PExpD5	3/25/2000	6:45	295	QY 68	ND
PExpD14	4/3/2000	9:30	250	QY 69	ND
PExpD14	4/3/2000	11:15	245	QY 70	ND
PExpD14	4/3/2000	14:30	275	QY 71	ND
PExpD14	4/3/2000	23:00	250	QY 72	ND
PExpD15	4/4/2000	3:10	415	QY 73	ND
PExpD15	4/4/2000	6:50	165	QY 74	ND

Subject	DH				
Body Weight (kg)	90.9				
Sex	M				
Age	56				
Dose Group (mg/kg-d)	0.02				
Study Exposure Day	Actual Date	Actual Time	Vol (ml)	Sample	Concentration (ppm)
Baseline	3/9/2000	6:30	250	DH 8	ND
Baseline	3/9/2000	8:00	115	DH 9	ND
ExpD1	3/14/2000	10:30	165	DH 10	ND
ExpD1	3/14/2000	13:10	115	DH 11	4.64
ExpD1	3/14/2000	15:40	130	DH 12	6.32
ExpD1	3/14/2000	17:40	178	DH 13	6.73
ExpD1	3/14/2000	21:00	175	DH 14	9.26
ExpD2	3/15/2000	1:20	290	DH 15	4.24
ExpD2	3/15/2000	3:45	345	DH 16	3.65
ExpD2	3/15/2000	6:40	350	DH 17	1.59
ExpD2	3/15/2000	7:30	140	DH 18	2.30
ExpD2	3/15/2000	8:55	205	DH 19	2.20
ExpD2	3/15/2000	10:30	245	DH 20	3.20
ExpD2	3/15/2000	12:55	170	DH 21	6.83
ExpD2	3/15/2000	15:45	260	DH 22	6.49
ExpD2	3/15/2000	17:20	140	DH 23	10.23
ExpD2	3/15/2000	21:45	175	DH 24	6.27
ExpD3	3/16/2000	4:25	265	DH 25	8.29
ExpD3	3/16/2000	7:15	180	DH 26	5.17
ExpD3	3/16/2000	8:00	40	DH 27	9.14
ExpD8	3/21/2000	10:20	165	DH 28	8.91
ExpD8	3/21/2000	11:35	170	DH 29	3.62
ExpD8	3/21/2000	12:30	135	DH 30	2.34

## Urine Perchlorate Data - 0.02 mg/kg/d

<b>Study Exposure Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (ml)</b>	<b>Sample</b>	<b>Concentration (ppm)</b>
ExpD8	3/21/2000	15:05	175	DH 31	5.66
ExpD8	3/21/2000	16:40	130	DH 32	9.14
ExpD8	3/21/2000	18:00	200	DH 33	4.39
ExpD8	3/21/2000	21:28	175	DH 34	3.74
ExpD9	3/22/2000	1:47	285	DH 35	5.43
ExpD9	3/22/2000	7:00	310	DH 36	4.43
ExpD9	3/22/2000	8:00	80	DH 37	6.22
ExpD14	3/27/2000	9:40	165	DH 38	3.33
ExpD14	3/27/2000	11:30	140	DH 39	3.32
ExpD14	3/27/2000	13:22	145	DH 40	8.68
ExpD14	3/27/2000	14:45	215	DH 41	5.51
ExpD14	3/27/2000	15:50	145	DH 42	6.75
ExpD14	3/27/2000	17:10	150	DH 43	4.08
ExpD14	3/27/2000	18:46	155	DH 44	5.42
ExpD14	3/27/2000	20:21	180	DH 45	0.93
ExpD14	3/27/2000	21:08	195	DH 46	ND
PExpD1	3/28/2000	1:30	260	DH 47	ND
PExpD1	3/28/2000	6:00	370	DH 48	1.90
PExpD1	3/28/2000	7:35	200	DH 49	3.73
PExpD1	3/28/2000	11:05	175	DH 50	3.30
PExpD1	3/28/2000	12:35	170	DH 51	1.44
PExpD1	3/28/2000	14:30	145	DH 52	0.79
PExpD1	3/28/2000	15:45	175	DH 53	ND
PExpD1	3/28/2000	17:45	170	DH 54	1.17
PExpD1	3/28/2000	18:44	130	DH 55	ND
PExpD1	3/28/2000	22:36	170	DH 56	ND
PExpD2	3/29/2000	3:47	340	DH 57	ND
PExpD2	3/29/2000	6:55	225	DH 58	ND
PExpD2	3/29/2000	9:00	155	DH 59	ND
PExpD2	3/29/2000	13:30	195	DH 60	ND
PExpD2	3/29/2000	16:30	200	DH 61	ND
PExpD2	3/29/2000	19:25	180	DH 62	ND
PExpD2	3/29/2000	21:05	160	DH 63	ND
PExpD3	3/30/2000	5:15	400	DH 64	ND
PExpD3	3/30/2000	6:30	135	DH 65	ND
PExpD3	3/30/2000	9:20	200	DH 66	ND
PExpD3	3/30/2000	11:16	195	DH 67	ND
PExpD3	3/30/2000	12:55	155	DH 68	ND
PExpD3	3/30/2000	16:15	225	DH 69	ND
PExpD3	3/30/2000	18:30	185	DH 70	ND
PExpD3	3/30/2000	21:30	170	DH 71	ND
PExpD4	3/31/2000	4:45	375	DH 72	ND
PExpD4	3/31/2000	7:30	190	DH 73	ND
PExpD4	3/31/2000	10:00	165	DH 74	ND
PExpD4	3/31/2000	12:30	140	DH 75	ND
PExpD4	3/31/2000	14:00	150	DH 76	ND
PExpD4	3/31/2000	16:15	215	DH 77	ND
PExpD4	3/31/2000	18:45	150	DH 78	ND
PExpD4	3/31/2000	20:15	240	DH 79	ND
PExpD15	4/1/2000	4:55	330	DH 80	ND

## Urine Perchlorate Data - 0.02 mg/kg/d

Study Exposure Day	Actual Date	Actual Time	Vol (ml)	Sample	Concentration
					(ppm)
PExpD15	4/1/2000	6:40	225	DH 81	ND
PExpD15	4/1/2000	8:00	130	DH 82	ND

**Subject** JS2  
**Body Weight (kg)** 106.3  
**Sex** m  
**Age** 26  
**Dose Group (mg/kg-d)** 0.02

Study Exposure Day	Actual Date	Actual Time	Vol (ml)	Sample	Concentration
					(ppm)
Baseline	3/16/2000	0:00	245	JS2 5	ND
Baseline	3/16/2000	6:10	395	JS2 6	ND
ExpD1	3/21/2000	8-12AM	615	JS2 7	0.37
ExpD1	3/21/2000	12-4PM	975	JS2 8	0.33
ExpD1	3/21/2000	4-8PM	405	JS2 9	1.41
ExpD1	3/21/2000	8-12PM	220	JS2 10	1.01
ExpD2	3/22/2000	bed-8AM	450	JS2 11	0.58
ExpD2	3/22/2000	8-12AM	985	JS2 12	0.41
ExpD2	3/22/2000	12-4PM	655	JS2 13	0.63
ExpD2	3/22/2000	4-8PM	460	JS2 14	2.35
ExpD2	3/22/2000	8-bed PM	260	JS2 15	2.10
ExpD3	3/23/2000	bed-8AM	280	JS2 16	0.60
ExpD3	3/23/2000	8-bed PM	235	JS2 17	0.39
ExpD8	3/28/2000	4-8PM	505	JS2 18	1.71
ExpD8	3/28/00	12-4PM	645	JS2 19	0.27
ExpD8	? 3/28/00	8-12AM	760	JS2 20	0.14
ExpD9	3/29/2000	bed-8AM	540	JS2 21	1.44
ExpD14	4/3/2000	bed-8AM	745	JS2 22	0.47
ExpD14	4/3/2000	8-12AM	575	JS2 23	0.55
ExpD14	4/3/2000	12-4PM	625	JS2 24	0.87
ExpD14	4/3/2000	4-8PM	390	JS2 25	0.63
ExpD14	4/3/2000	8-bed PM	330	JS2 26	0.13
PExpD1	4/4/2000	8-12PM	1270	JS2 27	ND
PExpD1	4/4/2000	12-4PM	640	JS2 28	ND
PExpD1	4/4/2000	4-8PM	645	JS2 29	ND
PExpD1	4/4/2000	8-bed PM	915	JS2 30	ND
PExpD2	4/5/2000	bed-8AM	730	JS2 31	ND
PExpD2	4/5/2000	8-12AM	750	JS2 32	ND
PExpD2	4/5/2000	12-4PM	740	JS2 33	ND
PExpD2	4/5/2000	4-8PM	380	JS2 34	ND
PExpD2	4/5/2000	8-bed PM	55	JS2 35	ND
PExpD3	4/6/2000	bed-8AM	495	JS2 36	ND
PExpD3	4/6/2000	8-12PM	1400	JS2 37	ND
PExpD3	4/6/2000	12-4PM	1275	JS2 38	ND
PExpD3	4/6/2000	4-8PM	810	JS2 39	ND
PExpD3	4/6/2000	8-bed PM	185	JS2 40	ND
PExpD4	4/7/2000	8-12AM	900	JS2 41	ND
PExpD4	4/7/2000	12-4PM	725	JS2 42	ND
PExpD4	4/7/2000	4-8PM	615	JS2 43	ND

Urine Perchlorate Data - 0.02 mg/kg/d

Study Exposure Day	Actual Date	Actual Time	Vol (ml)	Sample	Concentration
					(ppm)
PExpD4	4/7/2000	8-bed PM	1195	JS2 44	ND
PExpD4	? 4/7/00	bed-8AM	745	JS2 50	ND
PExpD5	4/8/2000	bed-8AM	795	JS2 45	ND
PExpD14	4/17/2000	8-12PM	460	JS2 46	ND
PExpD14	4/17/2000	12-4PM	505	JS2 47	ND
PExpD14	4/17/2000	4-8PM	505	JS2 48	ND
PExpD14	4/17/2000	8-bed PM	345	JS2 49	ND

Subject SK - not completed

Subject DC- not completed

Subject	GB	low-GBurine
Body Weight (kg)	86.2	
Sex	M	
Age	45	
Dose Group (mg/kg-d)	0.02	

Study Exposure Day	Actual Date	Actual Time	Vol (ml)	Sample	Concentration
					(ppm)
Baseline	4/13/2000	bed-0800	1425	GB 5	ND
ExpD1	4/18/2000	0800-1200	390	GB 6	ND
ExpD1	4/18/2000	1200-1600	155	GB 7	0.158
ExpD1	4/18/2000	2000-bed	1025	GB 8	0.155
ExpD2	4/19/2000	bed-0800	745	GB 9	0.230
ExpD2	4/19/2000	0800-1200	255	GB 10	0.670
ExpD2	4/19/2000	1200-1600	215	GB 11	0.725
ExpD2	4/19/2000	1600-2000	900	GB 12	0.647
ExpD2	4/19/2000	2000-2330	1580	GB 13	0.126
ExpD3	4/20/2000	2330-0800	1055	GB 14	0.181
ExpD8	4/25/2000	0800-1200	600	GB 15	0.187
ExpD8	4/25/2000	1200-1600	330	GB 16	0.448
ExpD8	4/25/2000	1600-2000	1040	GB 17	0.389
ExpD8	4/25/2000	2000-bed	2180	GB 18	0.109
ExpD9	4/26/2000	bed-0800	1170	GB 19	0.147
ExpD14	5/2/2000	0800-1200	475	GB 20	0.199
ExpD14	5/2/2000	1200-1600	410	GB 21	0.776
ExpD14	5/2/2000	1600-2000	1375	GB 22	0.518772101
ExpD14	5/2/2000	2000-2330	1575	GB 23	0.192009631
PExpD1	5/3/2000	2330-0800	1150	GB 24	0.428297344
PExpD1	5/3/2000	0800-1200	325	GB 25	0.541381386
PExpD1	5/3/2000	1600-2000	825	GB 26	0.151192536
PExpD1	5/3/2000	2000-2330	1625	GB 27	ND
PExpD2	5/4/2000	2330-0800	1075	GB 28	ND
PExpD2	5/4/2000	0800-1200	130	GB 29	ND
PExpD2	5/4/2000	1200-1600	360	GB 30	ND
PExpD2	5/4/2000	1600-2000	1300	GB 31	ND
PExpD2	5/4/2000	2000-0030	2350	GB 32	ND

## Urine Perchlorate Data - 0.02 mg/kg/d

<b>Study Exposure Day</b>	<b>Actual Date</b>	<b>Actual Time</b>	<b>Vol (ml)</b>	<b>Sample</b>	<b>Concentration (ppm)</b>
PExpD3	5/5/2000	0030-0800	1125	GB 33	ND
PExpD3	5/5/2000	0800-1200	170	GB 34	ND
PExpD3	5/5/2000	1200-1600	175	GB 35	ND
PExpD3	5/5/2000	1600-2000	1050	GB 36	ND
PExpD3	5/5/2000	2000-0015	2100	GB 37	ND
PExpD4	5/6/2000	0015-0800	1525	GB 38	ND
PExpD4	5/6/2000	0800-1200	270	GB 39	ND
PExpD4	5/6/2000	1200-1600	115	GB 40	ND
PExpD4	5/6/2000	1600-2000	575	GB 41	ND
PExpD4	5/6/2000	2000-0015	2125	GB 42	ND
PExpD5	5/7/2000	0015-0800	850	GB 43	ND
PExpD14	5/16/2000	0800-1200	375	GB 44	ND
PExpD14	5/16/2000	1200-1600	660	GB 45	ND
PExpD14	5/16/2000	1600-2000	1240	GB 46	ND
PExpD14	5/16/2000	2000-0100	2375	GB 47	ND
PExpD15	5/17/2000	0100-0800	800	GB 48	ND